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Yours for Growing Satisfaction-
NEOSHO NURSERIES Co.
NEOSHO MISSOURI

To Our Inquiring Friends:

Whether you set out only a few trees, shrubs or plants or a commercial orchard, you want them to grow and give satisfaction. No worth-while undertaking should be like a leap in the dark when a little study and thought will insure success.

Making the right start is of vital importance. A careful reading of the following pages will be a great help. The experienced planter will be able to check up what we say.

The man who starts a commercial orchard today has no excuse for making the mistakes that were unavoidable a generation ago for there is now available reliable information on the most favorable sites, soils, varieties, methods of cultivation, pruning, spraying, etc. The United States Department of Agriculture at Washington, D. C., your State Fruit Experiment Station and successful fruit growers will gladly help you. As a matter of fact many of our customers have been successful with our "Inside Facts of Profitable Fruit Growing" as their only guide.

"I have just finished marketing my Hale peaches on the 1,000 trees you sent me. I was amazed at their size and color. * * * * * Weil-Brockman Co., Commission men in Cincinnati, Ohio, stated that my Hale peaches were the finest that had been sent to that city this year. * * * * * I thank you for all the help that you have given me. People here think that I am quite a fruit man, but the truth is, that 'Inside Facts' has been my daily guide, and I credit you with all the success that I have made with my trees."—L. C. Beirne, Vaneenburg, Ky., August 30th, 1920.

This 80-page illustrated booklet is used in horticultural classes in many states. We send it free to every buyer of our fruit trees and plants, but to others we have to make a nominal charge of 10 cents per copy.

If, however, you want to make your place more beautiful and more valuable by planting ornamentals it will be advisable to make a complete plan. In drawing this our "How to Beautify Your Home Grounds" will prove a great help. The demand for this 50-page illustrated booklet is so great that we make a charge of 10 cents per copy but send it free to every buyer of ornamentals.

BUYING NURSERY STOCK: It is apparent that securing good trees and plants is essential to success. Your time, labor and money would be thrown away if you should plant inferior stock. Now, while you may be able to tell good stock when you see it and can recognize such common diseases as crown-gall and hairy root, you don't want to delay planting by waiting for replacements and the chances are you can not tell one variety from another when it comes from the nursery. So wherever you buy, you must trust some nurseryman to send you trustworthy stock. Of course you will place your order with a responsible concern that has the organization and equipment to handle, grow, pack and ship reliable goods; that is able and willing to stand back of every agreement with you; that is really interested in your success.

We have a 200-acre farm with about 100 acres of bearing apple and cherry trees, another orchard of about 32 acres planted in the spring of 1921, a test orchard of nearly five acres, 15 acres in vineyards, about 200 acres in nursery stock and over 300 acres in farm crops. The latter will be used for nursery stock in future seasons and is handled with that end in view. All our land is in the Ozarks and is over 1,000 feet elevation above sea level. Our equipment includes a large building right at the field for grading and sorting and our brief packing house contains unusually fine facilities for storing, handling and shipping, so that we can and do guarantee arrival in good condition even to distant points, New England, California and

Mexico. Three railroads serve Neosho: The Frisco; Kansas City Southern, and the Missouri and North Arkansas. A spur-track comes right to the door of our packing house.

Neosho, with a population of 3,968, is the center of a growing apple, grape and strawberry district. In 1922 over 260 carloads of strawberries were sent out from this city. The estimate of grape and apple crops this fall, 1922, is 80 to 100 earloads each. The Neosho Advertising Club is the father of "The Neosho Plan" renamed in some towns where it has been adopted as "The Golden Rule Plan."

PRICES: When we print our catalog we make quite a saving in cost by ordering two seasons' supply. Prices change according to supply and demand from year to year and usually in the same season, so we print them separately. Price is not necessarily an indication of quality in nursery stock. A very high price does not insure quality. On the other hand a very low price may entice the buyer to his sorrow.

In the spring of 1921 the Big Four Orchard Co., of Goodman, Missouri, bought 1,700 apple trees, on a price basis, threw out about 300 as unfit to plant and set out the rest. Only about 1,000 lived, but even these made a poor growth. The same season they planted 293 "Neosho" trees and every one made a good growth. Six rows were set in the middle of the same field and some here and there among the first lot. The Neosho trees were two-year XX (5-8 to 11-16) but were larger than most of the others which were supposed to be two-year XXXX.

The largest trees are higher in price because it costs us more to handle and pack them and in some cases they cost more to produce. The latter is also the case with some kinds and varieties. Every buyer should learn what makes a good tree and specify exactly what he wants. He should not rely entirely upon the inspection certificate which must be attached to every bundle or box. In some states at present the trees and plants are inspected during the summer in the field by state authorities but usually they do not see the root system and therefore can not tell whether the roots have crown-gall or hairy root. Some states like California and Virginia officially inspect all or a part of shipments of fruit trees at destination and will not let the planter take any that are infected with injurious insects or diseases.

Some states require outside nurserymen to file a bond (\$1000 to \$5000) for the performance of their obligations to their customers. There are various laws in many states designed to protect the buyer of nursery stock but none of them afford complete protection and in fact no one can really tell the vitality of a tree except by observation of its growth after transplanting. Again it is obvious that the buyer must trust some nursery to send good stock in good condition.

We have many pleased customers in states that have the most strict official inspection but we make no special grading for shipment into such states. Wherever you live you are entitled to trustworthy stock and as far as is humanly possible that is the only kind we send to any customer. Ask for addresses of nearby customers so you can learn of their experience first hand.

Let us know if we may help you.

Yours for Growing Satisfaction,

NEOSHO NURSERIES COMPANY,

Josiah J. Hazen,
President and General Manager.



An Ozark Orchard Scene of Diversified Fruits, Near Neosho.

SUCCESS IN FRUIT GROWING

WELL-RIPENED, sound fruit is a valuable food and in some form, fresh, canned or preserved, should form part of every meal. Fruit is necessary especially for the proper growth and health of children.

Home-grown fruit is well worth-while because—

1. It reaches the table fresh and fully ripened.
2. A continuous supply of fruit of superior quality may be secured regardless of market prices.
3. Any surplus may be dried, canned, preserved or sold to local markets.
4. The care and attention required provides a healthful, profitable occupation for spare time, affording pleasure and satisfaction to those who like to see things grow.
5. In many localities fruit is often difficult to obtain unless grown in the home garden.

"Thousands of persons who have the opportunity to grow fruit for home consumption either neglect to set out the trees or plants, or if they have them, fail to give them the care that brings success. Formerly one of the cheapest commodities used in the household, fruit has now taken its place in the list of high-priced foods and its production for home use means a large saving in the family living expense. Even the grower of fruit in small quantities can now dispose of any surplus at a profitable figure. Home-grown fruit should no longer be regarded as an incident in family life but as a distinct asset."—BETTER FRUIT, January, 1920.

The commercial grower has a different problem. He requires large yields as nearly every year as possible, good shipping quality and attractiveness in appearance, whereas the home grower aims at quality and a continuous supply throughout the season.

Anyone who intends to grow fruit commercially should seek complete information from other growers, from his State Fruit Experiment Station, from the Department of Agriculture at Washington, D. C., and all other reliable sources. He should know how to select a good site, choose varieties adapted to his climate and to the markets he expects to supply, etc.

The home grower is limited in choice of site and soil but has a far wider range of kinds and varieties from which to choose. There are over 2,000 named varieties of apple and the number propagated by any one nurseryman must of necessity be comparatively few.

There are probably no two people who have the same sized plot available or would choose the same kinds of fruit, but the following diagram may help to lay out your fruit garden.

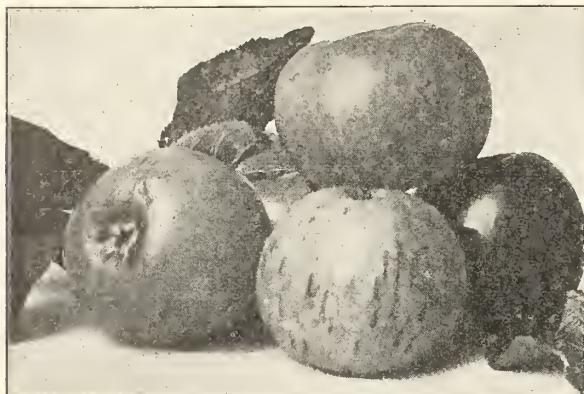
Between the rows of trees, Gooseberries and Currants may be planted 4 feet apart, also strawberries 12 to 24 inches apart. Currants and Gooseberries may be planted along the fence next the apple trees. Vegetables can be grown between the rows of trees the first few years.

PLAN FOR A HOME ORCHARD—146 FT. BY 150 FT.

15 ft.	
5 Apple.....	30 ft. apart
30 ft.	
5 Apple.....	30 ft. apart
25 ft.	
7 Cherry.....	20 ft. apart
20 ft.	
7 Plum.....	20 ft. apart
20 ft.	
7 Peach.....	20 ft. apart
20 ft.	
40 Raspberry.....	3 ft. apart
6 ft.	
40 Blackberry.....	3 ft. apart
10 ft.	
16 Grape.....	8 ft. apart

Fruit trees do not thrive on poorly drained soil, and it is also desirable to have good air drainage so as to avoid injury from spring frosts. Cold air, you know, settles to the lowest levels. If you have a light, sandy soil your trees or plants are likely to suffer from extremes of heat and cold and from drought. If heavy clay, you will also be handicapped and it may be necessary to dig and throw out the surface soil where your trees are to be set, then throw out in another pile the subsoil to a depth of 8 to 12 inches. Then throw in a shovelful of old manure, bone meal or some general fertilizer and mix it thoroughly with the surface soil previously thrown out. Then set the tree, adding other surface soil, and finally scatter the subsoil over the surface around the trees. These holes should be about five feet in diameter for trees, two feet for currants and gooseberries and for raspberries and blackberries a trench about fifteen inches wide.

Selection of Varieties.—On pages 8 and 9 you will find a map and general information on varieties that succeed in different sections of the United States. You will then find the tables on pages 10, 15, 20 helpful in choosing varieties for quality, succession of ripening, etc. Note: It is wise to plant more than one variety of a kind. "It is an open question whether any variety is as productive or produces as fine fruit where self-sterilized." The Gravenstein, Northern Spy, Spitzenburg and Winesap apples, some varieties of Plum, Grape, etc., are more or less self-sterile and should have other varieties that bloom at the same time planted near them. The most profitable varieties of apples bloom medium to late in the spring. This does not affect their time of ripening, but they are less apt to be injured by late spring frosts. If you will give us a diagram of your plot, tell us what kinds and how many of each you want, we will gladly recommend varieties and arrangement.



Oldenburg, Duchess of—the Most Productive and Profitable Summer Apple.

When to Plant.—There is a time for everything. The best time for transplanting depends upon climate, weather conditions, etc. It is very important to set trees and plants while they are dormant and before the buds have started. Fall planting is desirable if the ground can be put in proper condition and well matured dormant stock can be secured and set out when the ground is neither too wet nor too dry and a week or two before the ground freezes. Two orchardists near Neosho set out our apple trees in February, 1920, and now have exceptionally nice young orchards. One lost only three out of 1,753 trees, the other lost none out of 1,000. That was a very mild month that year.

"Spring vs. Fall Planting is a moot point. The three main advantages of fall planting are: 1. Probability of getting the desired varieties. 2. The trees being planted in the autumn, growth may begin as soon as spring opens. 3. The work being done in the fall does not interfere with the spring rush. On the other hand nurserymen may be tempted to dig before the trees are 'ripe'; that is, before the leaves fall naturally. This is always a mistake which often proves fatal. Leaves must not be clipped or pulled, but allowed to fall naturally.

ally before the trees are dug. Another objection to fall planting is that the roots may not get a good hold on the soil before winter sets in. But where at least three weeks open weather can be counted upon before winter this objection has little weight."—M. G. Kains in "Home Fruit Grower."

In the North and wherever conditions in winter are severe on plant life, from low temperatures, drying winds, etc., spring is the best time to plant and as early as the soil can be properly worked. The ground should be plowed deep in the fall. The advantages of fall planting are: The ground is warm, the trees have time to become established and are ready to start growth when spring comes, there is usually less work pressing for attention and there is less danger of not being able to secure the varieties, size and age preferred. The objections to fall planting are the difficulty of getting trees that have properly matured in the nursery and of judging when the ground is in proper condition. Some prefer to get their trees in the fall and "heel" them in so as to have them ready to put out when conditions are right in the spring. Apple, pear and cherry, gooseberry and currant can be more safely planted in the fall further north than other kinds. Blackberry, raspberry and grape are usually planted in the spring. If set in the fall it is necessary to mound the dirt up over the tops to prevent injury from alternate freezing and thawing of the ground.

The map on page 8 indicates the general horticultural divisions of the United States. Spring planting is best in sections 1, 2, 8, 9, 10, 11, 12, 13, 14, 18. Either fall or spring planting is satisfactory in districts numbered 3, 4, 15. Fall, winter or spring planting is satisfactory in districts numbered 5, 6, 7, 16, 17. It is much better to plant in the spring than to lose a season's growth by waiting until the next fall.

How Far Apart to Plant.—That depends upon many things—the kind, the variety, the soil, the purpose, etc. For instance, in some orchards in the East, Rhode Island Greenings are planted 60 feet apart, with more upright-growing, young-bearing, shorter-lived varieties of apples in between as fillers. Other kinds of fruit trees and plants are set in the spaces between apple trees. To produce good fruit, trees need plenty of room for light and air, and the spraying, cultivation, etc., are then more easily and economically done. When the trees are once established it is too late to give them more room.

NUMBER OF TREES OR SHRUBS REQUIRED TO SET ONE ACRE

Feet in.	No.	Feet.	No.
1x3.8.....	11,880	10x12.....	368
2x3.8.....	5,940	12x12.....	302
2x5.....	4,356	12x16.....	226
3x3.....	4,840	16x16.....	170
3x6.....	2,420	18x18.....	134
3x8.....	1,815	20x20.....	108
4x4.....	2,722	20x30.....	72
4x6.....	1,815	24x24.....	75
4x10.....	1,089	25x25.....	69
5x5.....	1,742	30x30.....	49
5x8.....	1,089	32x32.....	42
6x6.....	1,210	34x34.....	37
6x8.....	907	36x36.....	33
8x8.....	680	38x38.....	30
8x10.....	544	40x40.....	27
10x10.....	435		

To determine the number of trees per acre for any given distance, multiply the distance between the trees in the row by the width of the row. Take the resulting answer and divide 43,560 by it. The resulting figure will give you the number of trees per acre.

For example: To determine the number of trees, planted 30x30, required to set one acre. $30 \times 30 = 900$. $43,560 \div 900 = 49$ trees per acre.

PLANTING DISTANCE

Apple.....	Usual distance 30 to 40 ft.
Apricot.....	16 to 20 ft. each way
Asparagus.....	1 to 2 ft. between plants, in rows 3½ to 3 ft. apart
Blackberries.....	2 to 5 ft. between plants, in rows 5 to 10 ft. apart
Cherry, Sour Sorts.....	16 to 20 ft. each way
Cherry, Sweet Sorts.....	20 to 30 ft. each way
Currants.....	4 ft. between plants, in rows 5 ft. apart
Gooseberries.....	4 ft. between plants, in rows 5 ft. apart
Grapes.....	8 to 10 ft. apart each way
Hedge Plants.....	1 to 2 ft. apart

Ornamentals.—The planting distance for ornamentals varies with the kind of shrub or bush and the purpose for which it is used. Roses should be planted about 2 feet apart, hedge plants about 1 foot, other shrubs about one-third to one-half their height when full grown.

Peach..... 16 to 20 ft. each way
Plum..... 16 to 20 ft. each way

On good soil the strong-growing Japanese sorts should be planted not less than 20 feet.

Pear, Dwarf..... 10 to 15 ft. each way
Pear, Standard..... 20 to 30 ft. each way

Quince..... 10 to 16 ft. each way
Raspberries, Black..... 3 to 4 ft. between plants, in rows 6 to 10 ft. apart. Some prefer Black Raspberries, 6x6 feet.

Raspberries, Red..... 2 to 3 ft. between plants, in rows 5 to 6 ft. apart.

Rhubarb..... 3 ft. between plants, in rows 4 ft. apart.
Strawberries..... Usual distance, 1½ to 2 ft. between plants, in rows 3½ to 4 ft. apart.

Obtaining Nursery Stock.—When you set out trees or plants for fruit or ornamental purposes, you will be wasting time, labor and money if you do not plant good stock. An apple orchard, for instance, should bear profitable crops for at least two generations. It takes 5 to 10 years for an apple orchard to come into profitable bearing and the cost of the stock is an insignificant item compared with other costs. We estimate that exclusive of the price of the trees, the care of an apple orchard for five years will cost about \$75 per acre. Any tree that dies or does not bear a reasonable amount of fruit is an expense. "A tree that bringeth not forth good fruit must be cut down and cast into the fire."

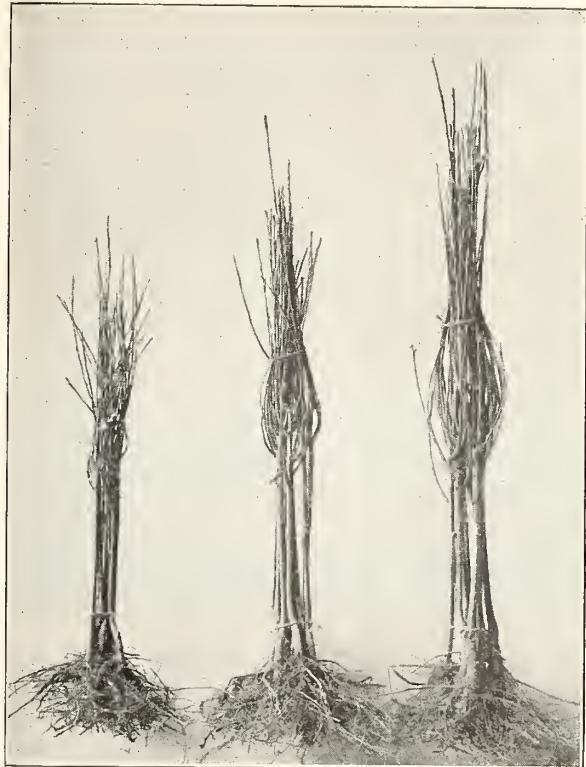
Unfortunately the beginner does not know what makes a good tree and it is difficult to describe good nursery stock. A good root system is essential. It is the foundation of the tree. It should have several main roots and a number of smaller ones. A bunch of very small hair-like roots putting forth from a common point indicate a disease called hairy-root. Wart-like growths on the larger roots or on the main stem just below the surface of the ground indicate crown-gall. Such trees should be destroyed. In states where nursery stock is inspected on arrival, the official inspectors will not let the buyer set out such trees. How common these diseases are is shown by reports from such states, for instance, in the fall of 1919 and spring of 1920 the Virginia inspectors threw out for crown-gall, 9,067 apple trees out of 173,545, and the license of one firm to ship into that state was revoked. The next year they threw out 7,072 of 163,819. In those two years we shipped 10,766 apple trees into Virginia and 78 were condemned—5,200 of these went to one customer and 65 were thrown out, but this was a rush fall shipment which we did not have time to grade carefully. Usually we grade or sort our fruit trees when they are dug and again when the order is filled, and the customers in states that do not have official inspection receive the same kind of stock we send to citizens who are protected.

"Good trees have a good healthy look, clean bark, and size enough to indicate a good free growth. Size of top is not so desirable as well-matured wood and plenty of roots."—Prof. E. F. Wickson, University of California.

"A poorly rooted tree may eventually make a satisfactory orchard tree, but it will be several years longer coming into bearing. Aside from the general health of the stock, perhaps no other factor is of so great importance as that it be well-rooted."—Circular No. 51, Bureau of Plant Industry, United States Department of Agriculture.

Size to Order.—There is a difference of choice as to the best size and age to plant among experienced planters. Our customers have expressed satisfaction with all different sizes from 2-year apple with a diameter of 3-4 of an inch up, to 1-year trees measuring 3-16 of an inch and averaging about 2 feet in height. It is obvious that a tree that takes two years in the nursery to make a growth of 1-2 inch in diameter is not as valuable as one that makes that growth in one year. A one-year apple tree may have a root system that has grown

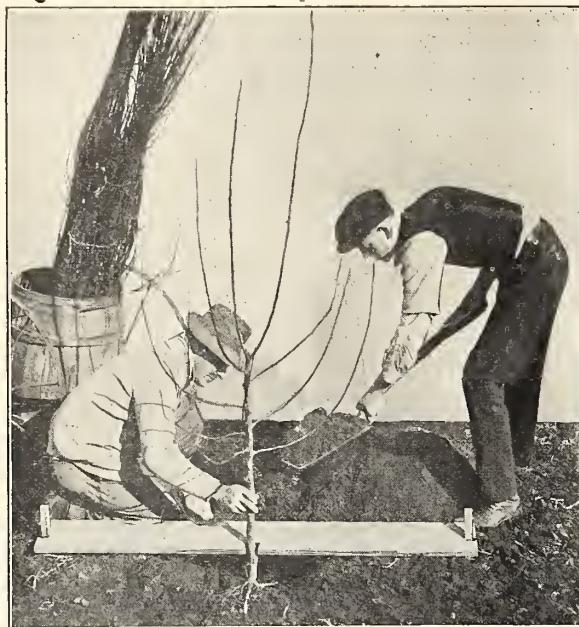
Two-year-old Cherry Orchard. Trees grown, planted and cared for by Neosho Nurseries Co.



Two-year Apple Trees.

Left—X size 1/2 to 5/8 inch in caliper. Middle—XX size 5/8 to 11/16 inch caliper. Right—XXX size 11/16 to 3/4 inch caliper.

in the nursery one year or two years or even three seasons, since some nurserymen cannot grow a marketable tree in less than three seasons, having to cut off the top of the trees at the ground at the beginning of the second year. Now by reason of a favorable soil and climate we produce apple trees in two years that measure 3-4 of an inch and run from 5 to 7 feet in height according to variety. These are grown from grafts, about 4 inches of a seedling apple root properly joined to a scion of the desired variety. In the spring of the second year the top is headed back about 22 to 24 inches from the ground. Some trees barked by rabbits or in cultivating are cut back to the ground and a new top is grown. We also propagate apple trees by budding. Early in the spring apple seedlings are planted. A bud of the variety desired is inserted in this seedling near the ground and this bud does not grow but is dormant until the next spring, when the top of the seedling is cut off close to the bud. So a one-year budded



Showing Use of Planting Board and Barrel.

apple tree has a root system that has grown two years in the nursery, the same as is the case with our two-year-old grafted trees.

"Unfortunately nursery trees are commonly sold by size rather than age. Size is not necessarily a criterion of the worth of a nursery tree. In fact, it is a worthless factor in judging unless considered in connection with age. A six-foot tree may be four or five years old, but it would be a much poorer tree than one of the same variety four feet high and two years old. A great many trees are being carried in the nursery until they are long past the best age for planting, simply to get them to a large size. This is particularly true of slow-growing varieties. The true standard, then, for buying trees is the age. In this, of course, size should be considered to the extent that the trees should be of good size for the variety at that age."—Wisconsin Agricultural Experiment Station, Bulletin 201.

The average buyer buys and most nurserymen sell fruit trees by height. It would be an easy matter for us to grow

tall, spindly trees but one-third to one-half of the top of an apple tree must be cut off when transplanted in the orchard. It is impossible to avoid losing some of the roots when the trees are dug and the root systems must not be called upon to support too much top. The heading back is also necessary to make the one-year tree put out side branches. The newly planted tree makes its start from the food stored up in the roots and trunk. Every year apple trees planted in pure sand in boxes in our office make a terminal growth of from 12 to 15 inches or more in February, March and April. They are watered every day but are not supplied with any plant food excepting what very little may be in the sand. Wholesale growers grade and sell their apple trees by caliper as a rule just as we do, although of course any tree that is not of reasonable height for its diameter is thrown out or put in the size smaller. If you plant 100 trees 11-16 of an inch in diameter, measuring the trunk at a point about two inches above the ground, it is obvious you will have a uniform lot of trees after they are planted and properly pruned, which would not be the case with that many trees graded by height alone.

Differences in Varieties.—Varieties of the same kind differ in habits of growth. For instance, the Jonathan is naturally a small grower and the Stayman quite the opposite, so that a XX 5-8 to 11-16-inch Jonathan is as large in comparison as a XXX 11-16 to 3-4-inch Stayman. The J. H. Hale peach and sour cherries are more dwarfish than other varieties of their kind. The Winter Nelis pear is a slender, straggly grower. One variety of apple will run a foot to two feet shorter than another variety of the same diameter. Some varieties like the Jonathan form side branches the first year, others like Stayman are like whips.

One-Year or Two-Year Trees.—Some growers prefer one-year apple because most two-year-olds offered for sale have heads already formed too high to suit them. Our two-year apple, headed 22 to 24 inches from the ground, meet with their approval. The two-year apple also weigh more and transportation charges are therefore greater.

"There is no difference of opinion as to the age at which peach trees do best when set. They should never be older than 'one year.' With apples, pears, plums, cherries, oranges, lemons, nuts, and other trees, practically all fruit growers prefer two-year trees to older ones and a steadily increasing number favor one-year trees. Such trees cost less to buy and to ship. None but thrifty ones are salable at that age—a very important point. They may be headed just where desired, whereas older ones cannot, having already formed their heads—a specially important point where low heads are desired, as they should be. Also young trees transplant far easier and better than do older ones."—M. G. Kains, in "Home Fruit Grower."



A Block of One-year-old Peach Trees.

In peach trees we grow one-year only. Seed from wild peach trees are planted in the fall and these put out the following spring. These seedling tops are budded that summer and do not put out until the next spring when the seedling tops are cut off. So the trees when dug have roots two years old and tops only one year. If we grew them another season they would be too large to transplant safely and the transportation cost would be greatly increased. As a matter of fact we burn up every year peach trees that measure 2 inches or more in diameter.

The same is more or less true with our plum trees as all but three varieties are grown on peach roots by budding.

In cherry we recommend one-year trees because of the experience of our customers and our own. So many times we have seen one-year-olds attain in a few years as good size as first-class two-year-olds planted at the same time in the same field and a good stand is much easier to obtain with one-year stock. Our one-year-olds have root systems that have grown two years in the nursery. They are budded on Mahaleb seedlings.

Importance of Good Condition.—It is of course necessary that your trees and plants should be in good condition when you set them. Trees that have been dug in the nursery before they were properly matured and dormant, or whose vitality has been impaired by drought, by exposure to drying winds and sun at digging, by extreme cold weather, will probably fail to grow. We have unusual facilities for handling nursery stock and for keeping it at the proper degrees of temperature and moisture. In fact we guarantee arrival in good condition.

Where to Buy.—The buyer of nursery stock is at the mercy of the seller because not one out of a hundred can tell one variety from another and the majority cannot tell when a tree is infected with some dangerous disease like crown-gall or insect pest like San Jose Scale nor even judge the condition on arrival.

You must trust somebody to send you truly-named varieties of the quality, age and size for which you pay. Nursery fields are inspected every summer by State authorities and each shipment must have on each package, box or bale a certificate of inspection but this says "found apparently free from dangerously injurious insects and disease." The inspectors do not see the root systems and therefore cannot say anything about the presence of crown-gall or hairy-root nor injurious insects on the roots.

It is therefore apparent that the buyer must depend upon the reliability of the nurseryman and will have to form an opinion largely upon what the nurseryman says and the way he says it.



A Few Fruit Trees, Plums, Peaches, Pears, Cherries, Apples, and Small Fruits in a Garden, or Even a Back Yard, Pay for Themselves a Hundred Times Over.

"Cheap trees are seldom, if ever, a bargain; the grower should insist on having first-class trees, and should be willing to pay for them. Provided the trees reach the grower in good condition, it matters little where they are grown."—*"Fruit Growing in Arid Regions,"* by Profs. Paddock and Whipple.

"The price to pay should always be a liberal one—the one a first-class nurseryman should get for first-class stock. Nothing is to be gained and much may be lost by hunting up cheap stock."—M. G. Kains in *"Home Fruit Grower."*

"A saving of \$2 to \$3 in the price of nursery stock may be lost a hundred times over before the first crop is gathered. This is one point at which parsimonious economy is like dropping money down a well."—Prof. Frank A. Waugh, Amherst, Mass.

Acclimated Trees.—You will find that experienced growers and horticulturists agree with the following statements:

"The inherent qualities of a variety do not change when the trees are grown in different sections of the country. If the variety is hardy, it will continue to be



Two-year-old Apple Trees in the Nursery Row.

so; if it is susceptible to some disease, it is not made less so by growing the tree during its nursery period in some particular region."—Farmers' Bulletin 631, U. S. Department of Agriculture.

"The question of the locality—North or South—from which to buy stock may be dismissed by saying that while in theory a tree grown in the North should do best in the North and vice versa, experience shows that well-grown, well-ripened stock from the South, properly handled, does fully as well as Northern grown, and stock from the North equally as well in the South. Such a statement, however, must not be allowed to dispel the other advantages of buying near home; namely, smaller freight bills, less drying of stock in transit, interest of the local nurseryman, etc."—M. G. Kains in "Home Fruit Grower."

"First-class condition is one hundred times more important than any outside information regarding the place where the trees were grown."

"The section from which trees come is unimportant so long as well-grown, healthy trees which are typical of the desired varieties are obtained."—H. P. Gould, U. S. Pomologist.

"It makes little or no difference where the tree is grown, so far as the climatic conditions are concerned; but what does make a difference is having good thrifty stock."—Prof. F. C. Sears, Professor of Pomology, Massachusetts Agricultural College.

We know this is true because we have customers in every state enjoying growing satisfaction with our stock, 1,854 in California, 1,869 in Massachusetts, 1,082 in Texas, 464 in Georgia, and in many foreign countries. "The goods arrived safely on February 16th and I can truthfully say they were the best packed parcel I have ever seen from any firm of nurserymen."—H. Thomas, London, England, March 2, 1920.

When Trees Should Bear.—Under the descriptions we have indicated the time dating from transplanting that it takes for the variety to *begin* bearing. It varies with kind, variety, weather conditions, soil and many other factors, not least of which is proper care in cultivation, pruning and spraying. "Begin bearing" is quite different from "profitable commercial bearing." We have no faith in so-called "ready-to-bear" or "bearing-age" trees.

"Except as specified below, the argument of some nursery agents that trees older than two years will bear sooner than young ones is not sufficiently supported by the experience of practical fruit growers to be accepted."

The exception is in the case of trees which are systematically root pruned while still standing in the nursery row. But such trees necessarily cost much more than does ordinary nursery stock, so they are in a class by themselves."—M. G. Kains in "Home Fruit Grower."

Trees that have already borne fruit in the orchard have been successfully transplanted and produced fruit within a year or two. We know of Delicious trees that have produced fruit two years after transplanting and there are commercial orchards of this variety seven years old that have never yet borne an apple.

Everbearing strawberries set out in the spring will bear the same year, standard strawberries the following spring. Raspberries, blackberries, dewberries, gooseberries, currant and grapes begin bearing the second or third year after transplanting. Peaches, plums, apricots and cherries may be expected the third season.

How to Prepare the Ground.—Land that has been in some cultivated farm or garden crop is usually in the best condition for fruit trees and plants. Plow deep and work the ground thoroughly. For fall planting, plow in the late summer. For spring planting, plow in the fall if possible, unless the soil is heavy clay or on a steep hillside that would wash badly.

When We Can Ship.—Nursery stock should not be dug until it is naturally matured and dormant, otherwise it is likely to give dissatisfaction. Usually we can begin digging about October 15th, and can ship up to about May 15th. Peony, iris, rhubarb and asparagus can be sent from September 15th on.

How to Handle Trees on Arrival.—Don't leave your trees in the express or freight office a single day.

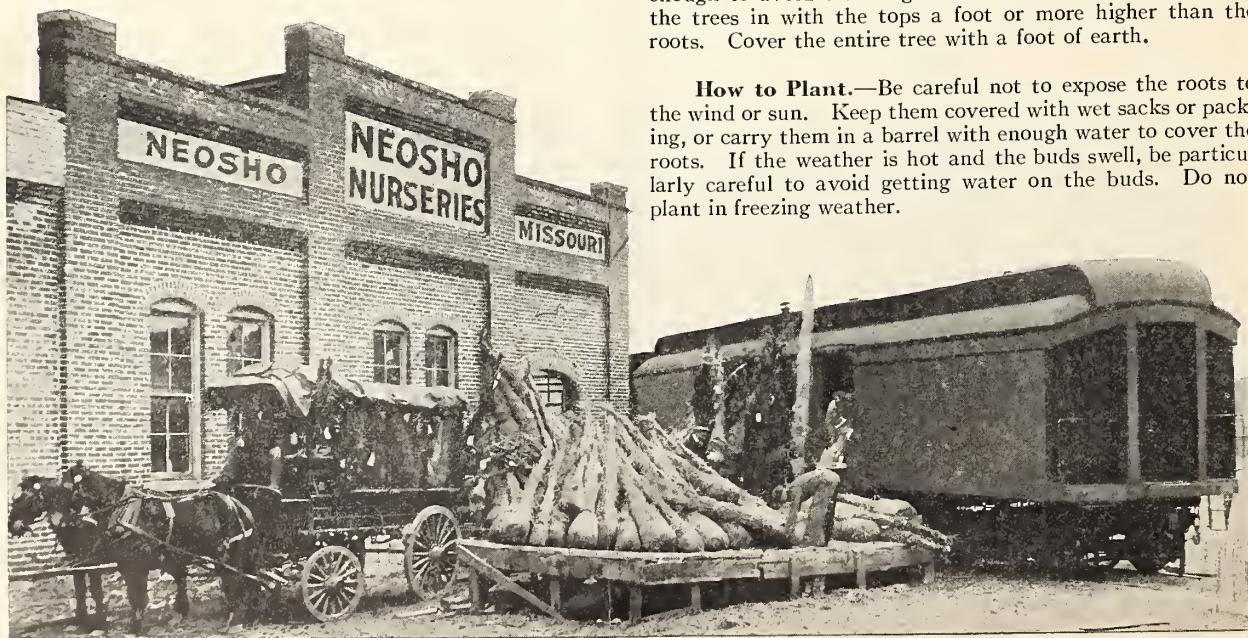
If there is any sign of frost in the packing about the roots, do not unpack. Put the box or bale in the cellar. The stock must thaw out gradually, without being disturbed.

If they reach you during freezing weather, put the package in a cool, frost-proof cellar or building and cover it with straw, or bury the box or package under a foot or more of earth.

If the weather is mild, but you are not ready to plant, unpack immediately and put them into a cool cellar, covering the roots with damp packing from the package and spread old sacks or canvas over them, sprinkling on water from time to time—just enough to keep them from drying out.

It is even better to heel them in. Select a dry, well-drained location. Dig a trench two feet deep and wide enough to avoid crowding the roots. Cut the bundles, put the trees in with the tops a foot or more higher than the roots. Cover the entire tree with a foot of earth.

How to Plant.—Be careful not to expose the roots to the wind or sun. Keep them covered with wet sacks or packing, or carry them in a barrel with enough water to cover the roots. If the weather is hot and the buds swell, be particularly careful to avoid getting water on the buds. Do not plant in freezing weather.



Prune the roots by cutting off the small fibre roots and any bruised or broken roots with a smooth cut. Extra long roots should be shortened a little. Make the cuts sloping on the under side so the feed roots will grow down.

Dig the holes large enough to take in all the roots without crowding. Put the top soil to one side, so you can use it to fill in around the roots. The holes should be in a straight line, otherwise you will be handicapped in the care of the orchard. Unless the soil is loose and porous, dynamiting is a good investment. This should not be done when the ground is wet.

Set the trees a little deeper than they stood in the nursery, in very sandy soils 2 to 4 inches deeper. Fall-planted trees may be set several inches deeper than when planting in the spring. Lean the tree a little toward the prevailing wind and the lowest permanent limb should be toward the southwest. Sift the top-soil dirt about the roots; then they take their natural position and are surrounded by fine dirt. *Press the dirt firmly about the roots;* when they are well covered but before the hole is full, several gallons of water should be added, if the ground is at all dry. Usually the earth is moist enough, and too much water would be injurious. Mound up the dirt about the tree three or four inches high; leave this loose and unpacked to conserve the moisture.

Remove the wire labels from the trees as soon as they are planted.

Pruning at Planting Time.—The newly transplanted tree makes its start on the food stored up in the roots. The tops must be cut back when setting the trees whether you buy them according to height or diameter. Train the tree now in the way it should grow, according to its kind and your requirements; low-headed for commercial purposes, high-headed for the home yard and garden.

When fruit trees, shrubs, roses or ornamental trees are planted, the limbs should be cut back about two-thirds, removing entirely undesirable branches.

With two-year apple and pear shorten the limbs to from 6 to 10 inches; with one-year apple and pear, cut off the trunk 2 to $3\frac{1}{2}$ feet from the ground.

With cherry cut off all except the leader and 4 to 6 of the best branches. These should be well spaced and on different sides of the trunk. In Northern sections some growers shorten the top and cut the 4 to 6 side branches back to 2 or 3 strong buds.

With peach, apricot and plum trees, cut off the trunk 12 to 15 inches from the ground and shorten the limbs back to about an inch.

Grape vines should be cut back to two or three sound buds, and the roots one-half to two-thirds.

The tops of blackberries, raspberries, gooseberries and currants are usually cut back before shipment from the nursery. They should be left 4 to 5 inches long.



Roots Before and After Pruning.

Detailed instructions are given in our "Inside Facts of Profitable Fruit Growing" and our "How to Beautify Your Home Grounds," sent free to every customer.

HOW TO MAKE YOUR ORCHARD PRODUCE

While waiting for your trees to come into bearing, FILLERS and INTERCROPS can be profitably used. The orchard trees must be set far enough apart so that when full grown they will have plenty of air and sunshine for the development of good fruit and also to carry on economically the operations of pruning, spraying, cultivation, and picking. However, the young trees do not need all the ground for a number of years.

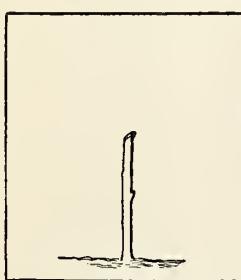
Young bearing, smaller growing apple trees, such as Wagener, Yellow Transparent, Wealthy, King David are best as fillers in an apple orchard, planted in the center of each square. Peach, plum and cherry are sometimes used in the center of each square or between the trees and rows but they require different management than apple. The danger is that the orchardist is tempted to let the fillers stand too long.

Between the trees, such intercrops as early potatoes and beans are particularly good; corn, also, if not planted too close to the trees. Garden truck is often quite profitable, near good markets. The small fruits also—strawberries, currants, gooseberries, raspberries and asparagus—make good intercrops. Do not plant any crop that does not permit cultivation nor one that requires very late cultivation. But if the soil is poor and lacking in fertility, such crops as cowpeas, soy beans, rye, vetch, and, under certain circumstances, clover, should be grown between the trees and plowed under to enrich the soil.

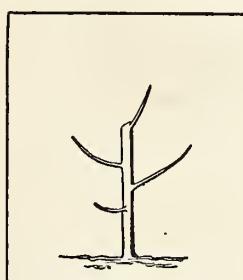
Note—Common Causes of Failure to Grow.

1. Destroyed by drying out from exposure to sun or drying winds, or freezing in the cold before setting out.
2. Crowding the roots into small holes cut in the sod.
3. Failure to firm the soil closely about the roots.
4. Leaving the trees or plants uncultivated.
5. Leaving the tops unpruned.
6. Not planting at the proper depth.
7. Planting in soil too wet or too dry.
8. Planting trees that were dug in the nursery before they became dormant.

Warning.—Do not cultivate nor irrigate your trees, etc., too late in the season, otherwise they will not mature sufficiently before cold weather and will be more susceptible to winter injury.



One-year Apple Tree.



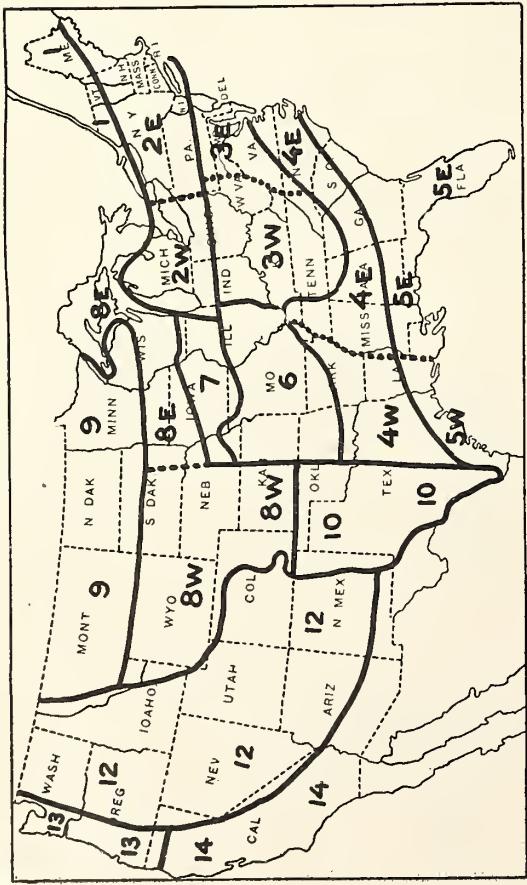
Two-year Apple Tree.

Proper Method of Pruning 1 and 2 Year Apple Trees at Planting.

COOPERATIVE BUYING

If two or more buyers send in their orders together at the same time, each one will be entitled to the quantity rates earned by the combined orders. For instance, if A orders 15, B 40 and C 45 apple trees, the 100 rate would apply.

Such orders will be packed separate and shipped together to one party or to each individual, as preferred.



ADAPTABILITY

This map shows the districts into which the United States is divided with reference to the influence on fruit-growing of latitude, elevation, prevailing winds, and the proximity to the ocean and other large bodies of water.

In the tables three stars (***) indicate that the variety is highly successful, two stars (**) that it is well recommended, one star (*) that it is known to succeed, a dotted line (...) that it is unsuited or that we can make no definite recommendation.

If you will check on the descriptive pages the varieties which are suited to your section, it will be easier to make your selection.

Some portions of one section may differ materially from other portions of that section. It is advisable to consult with any of your neighbors who may have had experience in fruit-growing in your locality. Your State Experiment Station will also be glad to give you the benefit of their investigations.

The varieties are listed in their approximate order of ripening:

ORDER

Neosho Nurseries Co.
Neosho, Missouri

Date.....19.....

Amount Enclosed \$.....

HOW TO SEND MONEY—Post Office Money Order, Bank Draft, Express Money Order or Check should be made payable to Neosho Nurseries Co. If coin or paper money is sent, the letter should be registered.

GUARANTEE: We will replace without charge any tree or plant that does not reach the purchaser in good condition or that is not free from injurious insects or disease, provided we are notified within ten days of receipt of the goods and such stock is held subject to our disposal. It is mutually agreed between purchaser and ourselves that we are not to be held liable for more than the purchase price if any stock should by chance prove untrue-to-name. We use every care to insure "Growing Satisfaction" to our customers.

Our Motto is
"Yours for Growing Satisfaction"

Name.....

Check below how you want order shipped.

Post Office.....

 Express Parcel Post Freight

County..... State.....

Street and No.
R. F. D. and Box.....

Unless you want us to use our Judgment in giving you other varieties in place of any we are out of, write NO here

Give Shipping Point if Other than Post Office.

In case the change is not satisfactory, it will be promptly adjusted.

Name.....

Write here when you want shipment made; otherwise we will ship this order at the earliest favorable date.

Shipping Point.....

County..... State.....

Street and No.
R. F. D. and Box.....

Number	Variety	Age & Size	Price	\$	Number	Variety	Age & Size	Price	\$
	APPLE					Am. Forwarded.....			
	Ada Red.....					PEAR-Dwarf			
	Baldwin.....					Anjou.....			
	Ben Davis.....					Bartlett.....			
	Black Ben.....					Duchess.....			
	Collins Red.....					Seckel.....			
	Delicious.....					QUINCE			
	Duchess of Oldenburg.....					Orange.....			
	Esopus Spitzenburg.....					Rea's Mammoth.....			
	Grimes Golden.....					Van Demah.....			
	Jonathan.....					PEACH			
	King David.....					Alton.....			
	Lowland (Livland) Raspberry.....					Arp Beauty.....			
	Maiden Blush.....					Belle of Georgia.....			
	Mammoth Black Twig.....					Carman.....			
	McIntosh.....					Champion.....			
	Melon.....					Crosby.....			
	Minkler.....					Early Elberta.....			
	Northern Spy.....					Early Rose.....			
	Paragon.....					Elberta.....			
	Red Astrachan.....					Elberta Cling.....			
	R 1 Greening.....					Eureka.....			
	Rome Beauty.....					Greensboro.....			
	Senator.....					Heath Cling.....			
	Stayman.....					Hiley.....			
	Wagener.....					Illinois.....			
	Wealthy.....					J. H. Hale.....			
	Willow Twig.....					Krummel.....			
	Wilson Red.....					Late Crawford.....			
	Winesap.....					Late Elberta.....			
	Winter Banana.....					Lola.....			
	Yellow Newtown.....					Mayflower.....			
	Yellow Transparent.....					PLUM			
	York Imperial.....					Abundance.....			
	CRABAPPLE					America.....			
	Excelsior.....					Burbank.....			
	Florence.....					Endicott.....			
	Hyslop.....					French Damson.....			
	PEAR-Standard					Italian Prune.....			
	Anjou.....					Lombard.....			
	Bartlett.....					Omaha.....			
	Flemish Beauty.....					Red June.....			
	Garber.....					Reine Claude (Green Gage).....			
	Keiffer.....					Shropshire.....			
	Seckel.....					Wild Goose.....			
Total	Forwarded.....		\$.....		Total	Forwarded.....			\$.....

Kindly write name of a friend who may be interested in planting fruit trees, berries or ornamentals.

Name.....

Town..... State.....

Street No..... R. F. D..... Box No.....

NEOSHO NURSERIES CO.

FRUIT TREES
BERRY PLANTS
NUT TREES



ORNAMENTAL
TREES & PLANTS
EVERGREENS

Neosho Missouri

We hope you will read this catalog carefully and find it "Helpful", "Sincere", "Authoritative", "Instructive", "Convincing", "The best guide to the average amateur planter I have ever seen", as many have written to us. There is more detailed information in our "Inside Facts of Profitable Fruit Growing", described on the last page, especially on later care of fruit trees and plants and a new edition will be ready in January.

When you figure the cost of the items you want possibly you will say as some do, "Your prices are so low I am afraid the quality is low too" or "Your prices are too high I can get my stock elsewhere for less money". We know what it costs to grow, handle and pack first-class trees and plants and what we would have to pay if we bought from wholesale nurseries and we have put our prices at a point where if we sell what we have there will be only a reasonable profit. We must make a little profit in order to continue to render service to the planter.

Most things you purchase are bought on faith. This is particularly true with nursery stock and seeds. Most people do not know good stock when they see it. They do not recognize such common diseases as crown-gall. They cannot see vitality in a tree, they cannot tell one variety from another. Therefore, wherever you buy you must trust the nurseryman. How important it is then that back of your order there should be a responsible individual or company with a reputation to maintain.

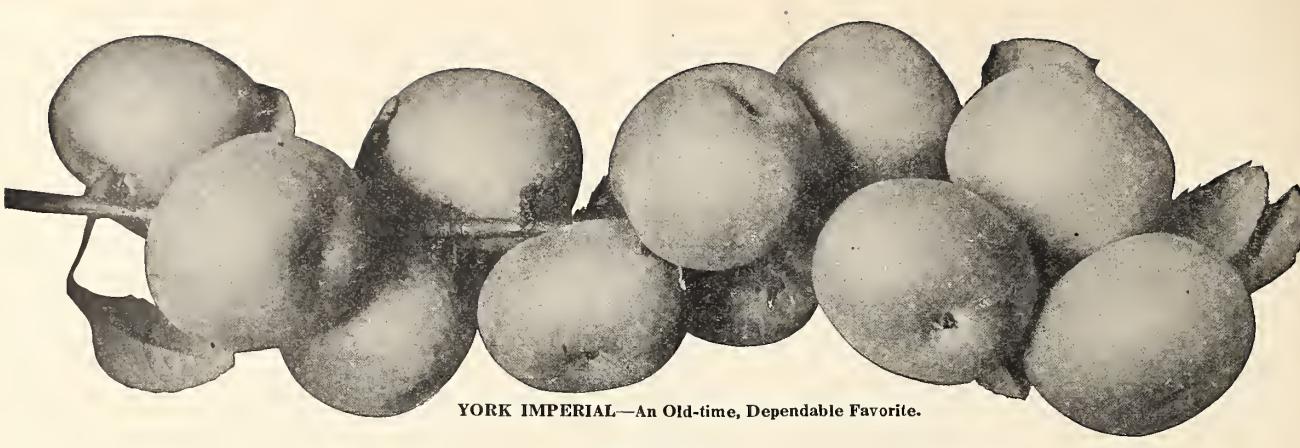
When our trees are dug, what we call culms are burned up and the good trees brought into our packing house. There at our request they have been inspected by a state official. In each load there are 9,000 or more trees and the largest number of unsatisfactory trees in any load was 9 trees. He left here November 27th to take up other work. When orders are filled they are again passed on by our own inspector.

You don't have to visit our nursery to insure getting good stock but can mail your order, small or large, with full assurance of entire satisfaction if we still have the varieties and sizes you prefer. If you want to ask any questions we shall be glad to answer them to the best of our ability.

Yours for "Growing Satisfaction",

NEOSHO NURSERIES CO.

P.S. We formerly did business under the name of Wm. P. Stark Nurseries but there is now no person nor firm by the name of Stark in any way interested in this company.



YORK IMPERIAL—An Old-time, Dependable Favorite.

APPLES

THE Apple is the king of fruits. It is a tonic as well as a nutrient, and one of the cheapest and most wholesome foods. There's a lot of truth in the old saying, "An apple a day keeps the doctor away."

Apple trees will grow wherever corn can be raised—in fact, there isn't a state in the Union, with one possible exception, where some variety of apple will not thrive.

No agricultural investment is safer or more productive in profits than a good apple orchard, favorably located and well managed. Ten to fifteen years ago so many apple trees were set out that many orchardists thought the markets would be glutted in about ten years. But the markets are as unsupplied as ever. The last U. S. Census report shows there are about 29,000,000 fewer bearing apple trees than in 1910 and about 36,000,000 less not-of-bearing age.

Every home garden and farm should have at least a few apple trees of summer, fall and winter varieties. They will give satisfaction far beyond the time, labor and money required.

This condensed table makes it easier to select varieties for your particular requirements and to choose an assortment that will give you apples the year round if you have a cool cellar. Winter varieties are picked when mature, but before they are ripe enough to eat. Maturity can be told by the changing from a hard dead green color to warmer reds and yellows, by the seeds turning brown, and by the readiness with which the stem separates from the twig.

ABBREVIATIONS—

Under "Size:" *M.*, medium; *M. L.*, medium to large; *L.*, large; *V. L.*, very large.

Under "Use:" *D.*, dessert; *C.*, cooking; *L-M.*, local market only; *M.*, distant or local market.

Varieties.	Color.	Quality.	Size.	Use.	IN NORTHERN STATES.			IN SOUTHERN STATES.		
					When to pick.	When ripe enough to eat.	Latest cold storage limit.	When to pick.	When ripe enough to eat.	Latest cold storage limit.
EARLY SUMMER										
Livland Raspberry	Red striped...	Very good...	M.	C. D. L-M.	July 10-30.....	July 13-Aug. 1...	Aug. 15	June 10-25.....	June 15-30.....	July 15
Yellow Transparent	Yellow.....	Very good...	M.	C. D. L-M.	July 10-30.....	July 13-Aug. 1...	Aug. 15	June 10-25.....	June 15-30.....	July 15
MIDSUMMER										
Red Astrachan....	Red striped...	Very good...	M. L.	C. D. L-M.	July 22-Aug. 25.	July 30-Sept. 3...	Sept. 20	July 1-20.....	July 10-Aug. 1...	Sept. 1
Melon.....	Red.....	Very good...	M. L.	D. C. L-M.	July 23-Aug. 26	Aug. 6-Sept. 17	Nov. 15	July 15-Aug. 20	Aug. 1-Sept. 5	Oct. 15
Wilson Red.....	Deep crimson	Good.....	M. L.	C. D. M.	July 29-Sept. 1	Aug. 15-Sept. 15	July 9-Aug. 9	July 24-Aug. 9
Duchess.....	Red striped...	Fair.....	M.	C. M.	Aug. 1-22.....	Aug. 5-26.....	Sept. 15	July 12-26.....	July 16-30.....	Sept. 1
LATE SUMMER										
Ada Red.....	Purplish red...	Very good...	M.	C. D. M.	Aug. 22-Sept. 22	Aug. 26-Sept. 26	Dec. 11	Aug. 10-20.....	Aug. 15-Sept. 1	Oct. 1
Maiden Blush.....	Yellow and red	Good.....	M.	C. M.	Aug. 20-Sept. 10	Sept. 5-Oct. 15	Nov. 1	Aug. 1-Sept. 15	Aug. 25-Sept. 15	Nov. 1
Wealthy.....	Red striped...	Very good...	M. L.	D. C. M.	Aug. 2-Sept. 5...	Aug. 16-Sept. 17	Dec. 15	July 20-Aug. 20	Aug. 1-Sept. 1...	Nov. 15
FALL										
King David.....	Dark red....	Very good...	M.	D. C. M.	Sept. 6-Oct. 2...	Oct. 1-25.....	Jan. 15	Sept. 1-15.....	Oct. 1-10.....	Jan. 1
McIntosh.....	Bright red...	Excellent...	M. L.	D. L. M.	Sept. 3-22.....	Oct. 15-25.....	Jan. 15	Aug. 18-Sept. 13	Sept. 20-30.....	Dec. 1
Grimes Golden....	Golden yellow	Excellent...	M. L.	D. C. M.	Sept. 8-28.....	Oct. 1-10.....	Jan. 15	Sept. 1-15.....	Sept. 10-30.....	Dec. 15
Wagener.....	Red and yellow	Very good...	M. L.	D. C. M.	Sept. 20-Oct. 6...	Nov. 15-25.....	Feb. 1	Aug. 31-Sept. 20	Oct. 1-20.....	Dec. 15
Jonathan.....	Bright red....	Excellent...	M. L.	D. C. M.	Sept. 15-Oct. 1...	Sept. 25-Oct. 15	Mar. 1	Aug. 28-Sept. 10	Sept. 15-Oct. 1...	Feb. 1
WINTER										
Black Ben.....	Bright red....	Fair.....	L.	C. M.	Oct. 5-20.....	Nov. 1-10.....	May 1	Sept. 25-Oct. 15	Nov. 1-10.....	Mar. 15
R. I. Greening....	Green & yellow	Very good...	L.	C. D. M.	Sept. 25-Oct. 15	Nov. 1-20.....	April 1	Sept. 15-Oct. 10	Oct. 10-Nov. 1	Mar. 1
Delicious.....	Red striped...	Excellent...	L.	D. M.	Sept. 30-Oct. 15	Oct. 15-25.....	Mar. 15	Sept. 15-Oct. 5...	Oct. 1-20.....	Feb. 15
Winter Banana....	Yellow and red	Good.....	M. L.	D. C. M.	Oct. 1-15.....	Oct. 15-25.....	Mar. 15	Sept. 15-30.....	Oct. 1-20.....	Feb. 15
Winesap.....	Dark red....	Very good...	M.	C. D. M.	Oct. 18-Nov. 1...	Nov. 15-25.....	April 1	Oct. 1-15.....	Nov. 1-15.....	Mar. 1
Spitzenburg.....	Yellow and red	Good to best	L.	D. C. M.	Oct. 4-23.....	Nov. 1-25.....	April 1	Sept. 13-Oct. 3...	Oct. 1-Nov. 1	Feb. 15
Rome Beauty.....	Red striped...	Good.....	L.	D. C. M.	Oct. 6-25.....	Nov. 1-10.....	April 1	Sept. 25-Oct. 10	Nov. 1-15.....	Mar. 1
Stayman Winesap...	Red striped...	Very good...	L.	C. D. M.	Oct. 6-20.....	Nov. 15-25.....	April 1	Sept. 25-Oct. 15	Nov. 1-15.....	Mar. 1
York Imperial....	Red striped...	Good.....	L.	C. M.	Oct. 1-20.....	Nov. 15-25.....	April 1	Sept. 25-Oct. 15	Nov. 1-15.....	Mar. 1
Northern Spy....	Red striped...	Very good...	L.	D. C. M.	Sept. 18-Oct. 4...	Dec. 5-15.....	April 15	Aug. 30-Sept. 18	Oct. 1-15.....	Jan. 15
Paragon Winesap...	Dark red....	Very good...	L.	C. D. M.	Oct. 4-Nov. 1...	Jan. 1-10.....	April 15	Sept. 25-Oct. 18	Nov. 5-15.....	Mar. 15
Baldwin.....	Bright red....	Good.....	M. L.	D. C. M.	Sept. 23-Oct. 23	Dec. 1-15.....	May 1	Sept. 5-23.....	Oct. 6-21.....	Feb. 15
Yellow Newtown....	Yellow.....	Excellent...	M. L.	D. C. M.	Oct. 5-29.....	Jan. 20-30.....	May 1	Sept. 22-Oct. 17	Nov. 1-15.....	April 15
Collins Red.....	Yel. and d. red	Good.....	M. L.	C. M.	Oct. 15-Nov. 1...	Nov. 15-25.....	May 1	Oct. 5-20.....	Nov. 1-15.....
Willow Twig.....	Yel. and l. red	Good.....	L.	D. C. M.	Oct. 15-Nov. 1...	Nov. 15-25.....	June 1	Oct. 5-20.....	Nov. 1-15.....

ADA Red Originated in Northwest Arkansas where (Late Summer) the only two orchards now in bearing are located and is harvested about August 15. Practically the same season as Maiden Blush and is being planted instead of this variety in this district. It is a particularly early bearer. The fruit is medium size, roundish; yellow, nearly covered with red and broken stripes of purplish crimson; flesh whitish; flavor mild subacid; quality good; good for dessert, excellent for cooking.

ALBERMARLE PIPPIN. (See Yellow Newtown.)

BALDWIN The Baldwin is preeminently the leading variety (Winter) in the commercial orchards of New York, New England, and certain parts of Canada; also it is one of the leading varieties of Michigan and Northern Ohio. In the South and Southwest it is not a desirable apple, because it ripens too early to be a good winter variety, and drops from the trees before its good qualities are developed. It does fairly well in the Pacific Northwest, but cannot be grown in competition with the Northeastern States. The tree is a strong grower, long-lived, and vigorous. It is somewhat slow in reaching maturity, but usually begins to bear abundantly about the seventh year. Fruit large to very large, uniform in size; form, roundish to conical; skin is tough and smooth, blushed and mottled with bright red; flesh yellow, firm, moderately coarse, crisp, tender, juicy, agreeably subacid, very good.

BLACK BEN The best of the Ben Davis family. It attains (Winter) a much higher color than the Ben Davis, Gano Red or kindred apple. The tree is hardier, more vigorous, and more prolific than the Ben Davis. Bears about the sixth year; fruit is large, solid dark red; flesh is white, firm, juicier than Ben Davis, subacid, fair quality. It is not very successful in the extreme northern part of the Northwest, but from the Atlantic to the Pacific, between the parallels of 32 and 42 degrees, it is one of the most important varieties grown. It is preeminently successful in Virginia, Kentucky, Tennessee, Illinois, Missouri, Arkansas, and portions of adjoining states.

COLLINS Red Tree hardy, not subject to canker; very (Champion) (Winter) heavy and early bearer. Fruit medium in size, roundish; attractive deep red striped with purplish carmine, but when not fully colored is yellow striped with red; picking season, Southwest Missouri, mid-October. Comparatively low quality but good for such a late keeper. Cold storage limit May or June. Sells well on Southern markets.

"The 1000 trees received last spring did fine. Only lost about 10 trees. The one-year-old trees made three times the growth that the two-year-old trees made. If I buy another piece of property this winter I shall most certainly buy all trees from you. I like your trees, your fair treatment, prompt shipment and will speak a good word for you whenever I can."—Frank Payne, Johnson County, Kans., Sept. 16, 1922.

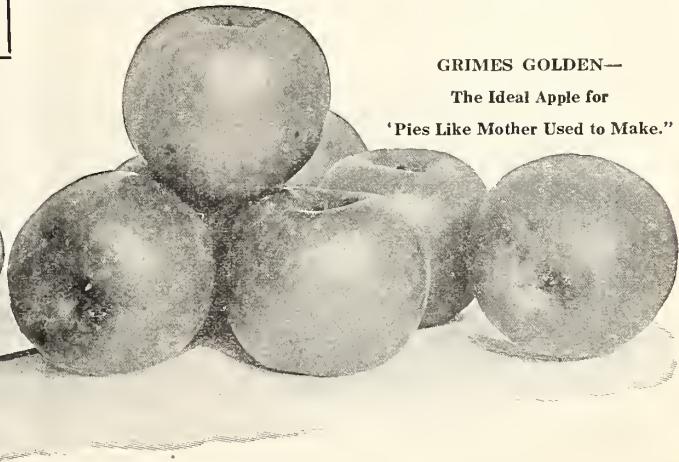


DELICIOUS—All that its Name Implies.
"The great National dessert Apple."

DELICIOUS (Winter) A really delicious apple. None can compare with it in flavor. Large, uniform in size, unique shape, round and long, tapering, with five distinct knobs at the blossom end. In color it is striped and marked with dark red, often becoming a solid crimson on the side exposed to the sun. Very highest quality, fragrant, crisp and juicy, mild in flavor, but not a sweet apple. It must be eaten to be appreciated. The tree is a hardy vigorous grower and forms a perfect head, with strong arching branches, capable of bearing enormous loads. Bears fruit about the fourth to seventh year.

Duchess of OLDENBURG (Midsummer) Attractive yellow apple, almost covered with red stripes; medium size. One of the most profitable summer varieties. The flesh is tender, juicy, subacid; very good for culinary purposes even before fully ripe. Tree is a moderate grower; can be planted close and is often used as a filler. Comes into bearing young, often fourth year. Bears heavy crops annually; great market apple and especially good cooker. Ripens in succession, requiring several pickings. Extremely hardy.

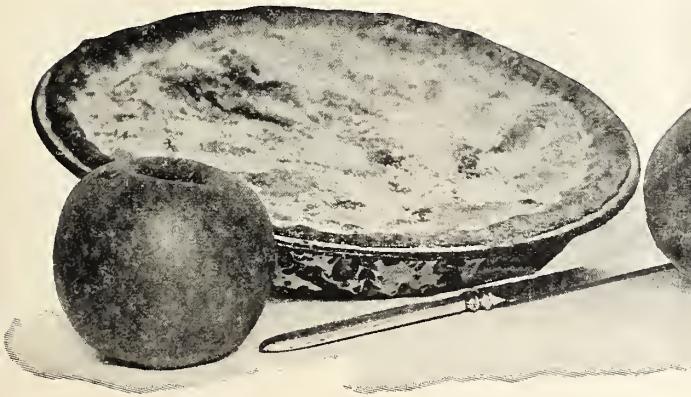
GRIMES GOLDEN (Fall) The standard of excellence, the best quality, profitable yellow apple; rich golden color, often showing a pinkish blush. Flesh is yellow, very firm, crisp but tender, rich, aromatic and juicy; very good to best quality; medium to large; an ideal dessert apple and a splendid cooker. Tree is a hardy, vigorous, upright, spreading grower and heavy regular cropper. Bears about the fourth year. The highest quality yellow apple and one of the best for home use and commercial planting. This variety is subject to collar-rot which kills the tree just when it should be in its prime. Plant only trees that have been double-worked on a variety that is not susceptible to this disease.



GRIMES GOLDEN—

The Ideal Apple for

"Pies Like Mother Used to Make."





JONATHAN—Best Quality Commercial Apple of its Season.

JONATHAN A grand, good apple; once tasted, always wanted. (Fall) Bright solid red, deep red on the sunny side. Flesh whitish, sometimes tinged with red. Firm, fine, very crisp and tender. It has an aromatic flavor and juice which is full of snap and sparkle. Medium size; very good to best quality. Tree is moderately vigorous, long-lived, an upright grower. Bears about fourth year. Produces good crops regularly. Fine for home and commercial planting.

KING DAVID Enormously productive, bearing heavy crops (Fall) year after year. Uniform shape, tapering toward the blossom end. Medium size; very dark rich garnet red, showing almost a purplish-black on the sunny side. Flesh is firm, tinged yellow, crisp, juicy, very good. Tree is a hardy, vigorous grower, comes into bearing about the fourth year. Sometimes used as a filler.

LOWLAND RASPBERRY Beautiful red and yellow apple; **Livland Raspberry** may be described as a Red (Early Summer) Transparent. Medium size; flesh is snow-white, tender, fine-grained, crisp and juicy. Very good. Tree is a strong, vigorous grower; reported to be shy bearer in Southwest Missouri. Bears fourth to sixth year. Less subject to blight than Yellow Transparent.

MAIDEN BLUSH Striking, highly colored, yellow apple, (Late Summer) with a deep crimson blush on one cheek. Round, flat, medium size; flesh white, crisp, tender, very juicy; a good eating and excellent cooking apple. Tree is vigorous, spreading, and open. Usually bears fourth to fifth year; often a shy bearer when young. A standard market variety and usually sells at higher average prices for varieties of its class.

McINTOSH One of the best early winter apples for north- (Fall) eastern states; noted for its high quality and delightful fragrance. Medium to large size, roundish, slightly flattened at the stem end. Beautiful deep crimson, striped with carmine and overspread with a heavy blue bloom. Crisp, snow-white flesh; is very tender and juicy, entirely different from the "meaty" apples like Spitzenburg and York. Makes a strong appeal to people who pay high prices for fancy fruit. Tree is long-lived, a strong, vigorous grower, with an open, spreading head, and very hardy. Bears fourth to fifth year. One of the best apples of its season, both for home planting and to supply not-too-distant markets.

MELON A late summer apple, the best dessert apple (Midsummer) of its season; resembles Wealthy, but succeeds farther south; medium to large; striped with red and yellow. Use for dessert, kitchen and local market. Tree is a good grower, vigorous, very hardy, and will bear enormous loads of fruit. Bears the fifth year.

NORTHERN SPY Attractive, red-striped winter apple; (Winter) large, roundish and plump, tapering slightly toward the blossom end. Flesh is firm, fine-grained, crisp, rich, subacid, very fine quality. It appeals to those who like a brisk, spicy apple that is not actually sour. Tree is a vigorous and unusually healthy grower. Should be planted 40 to 50 feet apart. Bears seventh to twelfth year. An old-time favorite.

OLIVER (Red) A medium to large attractive, roundish (Senator) apple of good to very good dessert quality. (Winter) Under color yellow, washed over nearly entire surface with bright red and with numerous gray or russet dots. A fall apple in the Ozarks usually picked early in September.

PARAGON WINESAP Paragon has the large size and very (Winter) good quality of the Stayman combined with the dark red color of the old Winesap. The true Paragon was introduced and named by Dr. W. L. Moores of Lincoln county, Tennessee, and has been largely planted under name of Mammoth Black Twig, giving the latter an undeserved reputation. Tree is equal in every respect to Winesap; a more vigorous, open grower. Bears sixth to seventh year, and thrives wherever Winesap can be grown.

RED ASTRACHAN The best general-purpose midsummer (Midsummer) apple for home use and market. Nearly covered with light and dark red stripes, overspread with bloom like a plum; large, roundish; white flesh tinged with red; flavor aromatic, brisk, subacid; very good. Good for eating fresh out of hand when fully ripe; an ideal cooker. Tree is hardy, of the Russian type, moderately vigorous, upright, spreading; adapted to every state where apples grow. Bears fourth year.

RHODE ISLAND GREENING A large, roundish, green (Winter) winter apple, yellow when fully ripe. Tender and full of sparkling juice, with rich flavor unsurpassed by few apples. One of the best dessert apples and an excellent cooker. Tree is a large, vigorous grower, with wide spreading branches, drooping and dense; does not come into bearing very young.



Northern Spy—High Quality and Long Keeper.



KING DAVID—A Fine "Filler" Apple.



Paragon Winesap—Large Size and Good Quality.

ROME BEAUTY Large, roundish, oblong apple, handsomely colored and striped with bright red; one of the most beautiful and profitable late winter apples. Flesh is firm, crisp, juicy and of good quality. Splendid storage apple. Tree is a vigorous, upright spreading grower; hardy, except along the Canadian border. Very profitable in the central United States, Rocky Mountain country, and some Southern states; a splendid bearer, blooms late. Bears fourth to fifth year.

SENATOR (See Oliver).

ESOPUS (Esopus Spitzenburg) Large, handsomely colored, bright purplish-red, shaded with yellow and striped with darker red; flesh firm, tinged with yellow; moderately juicy, spicy, very best quality. Tree is moderately vigorous, spreading; a rather moderate cropper. Thrives in favored localities, particularly in the Northwest. Should be planted in deep, fertile, well-drained soil. Bears about the seventh year.

STAYMAN WINESAP The largest of the Winesap family. (Winter) Striped and splashed with dark crimson, resembling Winesap, except that the color is not quite so brilliant; flesh tinged with yellow, firm, crisp, sprightly pleasant, with a rich subacidity that appeals to everyone. Very good quality. Tree has a dark, heavy foliage, closely resembling its parent, the Winesap; thrives on thin dry soil where Winesap would fail. Reliable annual cropper; bears the fourth to fifth year. In Southwest Missouri and Northwest Arkansas some commercial growers do not favor Stayman as they claim that the fruit cracks and that the tree is subject to winter injury but others in this same district find it a very profitable variety and a young bearer.

"This is a variety no fruit grower can afford to omit from the list, whether for family use or commercially. It possesses more valuable points than any one apple with which I am acquainted. It adapts itself, as far as tried, to all climates, all altitudes, all soils, and is par excellence everywhere."—Dr. J. H. Funk, Bulletin No. 152, Department of Agriculture, Pa.

WAGENER Bright, red apple, strongly contrasting yellow (Fall) background color; medium to large; whitish flesh, tinged light yellow, firm, fine-grained, juicy, very good quality. Tree is straight, vigorous, upright grower; enormously productive, usually bears third to fourth year. Often used as a filler.

WEALTHY A most dependable and widely planted (Late Summer) late summer apple; bright red striped; medium to large size; white crisp flesh tinged with red; good for cooking before it ripens. Ripens over a long season. Very good quality. Tree is an upright grower, often used as a filler; very hardy; bears fourth or fifth year. Adapted to many soils and climates, but especially suited for Northern planting where extreme hardiness is required. Good shipper; especially recommended for home use and commercial planting.



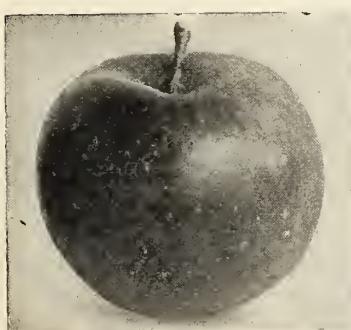
Wilson June—Most Beautiful of its Season, Good Shipper.

WILLOWTWIG Medium to large, yellowish green, washed (Winter) and striped with dull red; flesh yellowish, mild subacid; good quality; a good, long keeper. Tree strong grower, spreading, with drooping willowy branches. Rather early and regular bearer.

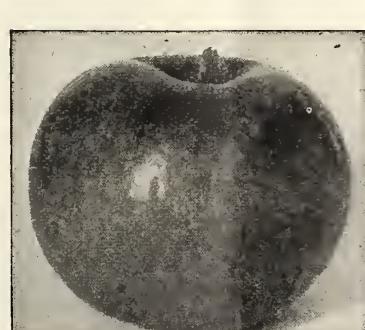
WILSON JUNE A deep, solid crimson, like a Red June; (Midsummer) large; firm white flesh; good quality. Tree makes a moderately strong growth, is hardy, vigorous, very productive, bears young. Most beautiful of its season; good shipper.

WINESAP One of the oldest and most popular apples, a (Winter) good shipper and an exceptionally good keeper in ordinary and cold storage. Well-grown Winesaps command a premium over most other winter apples with commercial buyers. Splendid bright red, indistinctly striped with dark purplish-red. Flesh is tinged with yellow; very firm, juicy, very good quality. Medium size; a favorite with everyone. Tree is a vigorous, spreading open grower. Hardy, adapted to planting in every part of the country, except in the extreme Northern states. Will succeed on many different kinds of soils, preferring a deep loam. It is a heavy, regular bearer. Produces the first crop about the fifth year. As the tree gets older it has a tendency to produce undersize fruit, but this can be overcome by proper pruning and culture.

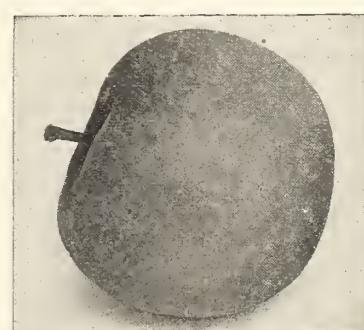
WINTER BANANA Very showy, bright yellow, with a (Winter) pinkish-red cheek; noted for its brilliant, transparent, waxy appearance; medium size; good quality, with a rich, spicy flavor. Tree is a good average grower, adapted to many conditions; flat, spreading top; hardy, except in extreme North; regular cropper; bears about the fifth year.



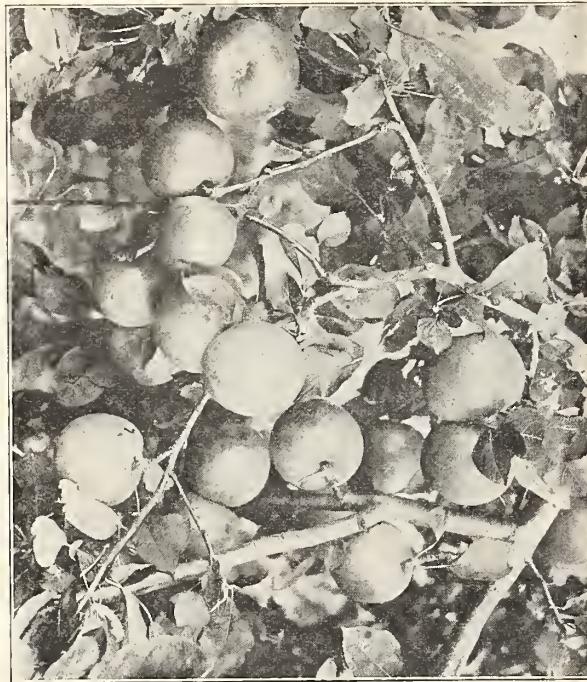
Rome Beauty—A Profit Maker East and West.



Wealthy—Hardy—High Quality and the Best Money Maker of its Season.



Winter Banana—A Favorite in the West, North and East.



Yellow Newtown—A Beautiful Yellow Apple.

"Am pleased to say that every one of the trees bought from you lived (with exception of two cherries and two plums) and have made a vigorous growth. They have been growing all the year and are still growing. I enclose two postcard pictures photographed on the 15th of July. The trees are much larger now than when photographed. I also enclose photograph of some of the 3000 grapes of the Vinifera variety. Our grapes look well also."—W. M. Cady Lumber Co., Inc., Rapides County, La., Sept. 18, 1922.

YELLOW NEWTOWN Medium to large; a beautiful yellow (Albermarle Pippin) low; flesh very firm, meaty, brittle, (Winter) juicy; highest quality for dessert and excellent for culinary purposes.

Tree is a good grower, but must have fertile soil and good air drainage. Hardy; bears the fifth year. It is firm, keeps very late and ships well. The crop is mostly exported, having a long established reputation in Europe where it commands the best prices for American apples. Grown chiefly in California, Washington and Virginia.

YELLOW TRANSPARENT One of the best extra early (Early Summer) apples; extremely hardy; a beautiful clear yellow, with

smooth waxy brilliant skin which gives it a transparent appearance. Fine-grained white flesh, sprightly subacid, pleasant. Unexcelled for pies, tarts and apple sauce. Medium size. Tree is a moderately vigorous, straight, upright and compact grower; often used as a filler; usually bears third to fourth year. A reliable cropper. Fruit ripens over a period of three weeks and requires several pickings. Profitable for near-by markets. Excellent for home planting.

It is adapted to all apple soils and climates. One of the best apples for the South, and is very extensively planted in the North because of its unusual hardiness. It will sometimes blight like the pear if planted on soil that is too rich and the growth forced too much by fertilization. Succeeds on thin soils.

YORK IMPERIAL Bright, pinkish-red, striped with dark (Winter) red; firm, crisp, meaty flesh, brittle, a little coarse, but juicy and fair quality.

Large; its oblique or lopsided shape is a noticeable characteristic objectionable only because it is difficult to pare with a machine. However, it shows up well, and, because the tree is of ideal shape, a very strong, vigorous grower and enormously productive, it is a profitable apple, widely planted in the middle Atlantic States and Central West. A very regular bearer, beginning about the seventh year; seldom fails. A favorite on the Southern markets.

"The stock which you have shipped me during the past few years has done well and I can certainly recommend you to any one desiring to purchase nursery stock of varieties and kinds you offer for sale." —O. M. Piper, Dougherty County, Ga., Sept. 18, 1922.

CRABAPPLES

CRABAPPLES should be planted for beauty of tree and fruit, as windbreak, and for the value of the fruit. They are delicious for cooking, preserving and jellies. Excelsior is delicious for eating fresh.

EXCELSIOR Very large for a crabapple, nearly as large (Fall) as a medium sized apple. Very attractive; yellow almost covered with bright red. Flesh is white, juicy, subacid, excellent in quality for dessert and for culinary uses. Tree is good strong grower; hardy, healthy; comes into bearing rather young, and bears good crops alternate years.

FLORENCE Medium size, yellowish-white, mostly (Late Summer) overspread with brilliant pinkish red. Flesh tinged with yellow, juicy, quite subacid, somewhat astringent. Tree is moderately vigorous; at first upright spreading but eventually inclined to droop. Desirable for commercial planting because it bears very young, is very productive, reliable cropper and the fruit is of good size, very attractive and good quality.

HYSLOP Large, very brilliantly colored, dark red or (Early Winter) purplish, overspread with thick blue bloom. Tree is a good grower, very hardy, reliable bearer, usually biennially. Flesh yellow, subacid, astringent; good for culinary purposes. Desirable for home use and market.



Excelsior—The Largest and Best Crab for Eating Fresh.

"My peaches were just wonderful—had such large and fine ones. One two-year-old Belle of Georgia had nine fine large peaches this year. Our postmaster always gets some trees with me and he said to tell you the trees could not be better and we are going to order more in the spring."—Dr. T. J. McDaniel, Hancock County, Ill., Sept. 18, 1922.

"The trees I bought of you are all doing well except a few in bad locations. I wish also to say to you that the J. H. Hale peach trees grow well for me. Some one, just before I made my purchase, wrote in the Country Gentleman that the Hale did not do well everywhere, so I did not order largely of them. I wish I had more since I see the stocky, vigorous growth they make. The fruit is also fine."—Abner Clark, Brown County, Ill., Sept. 16, 1922.

J. H. HALE



PEACHES

FRESH, ripe, home-grown peaches over a season of nearly three months are a most delicious fruit that may be had at little expense. They can be grown almost as far north as apples and will succeed farther south. They will do well on a wide range of soil types, even moderately heavy clay loams and clay, but the soil must be well drained. The soil should be moderately fertile. Peaches will not do well on hard impervious clay nor on very alkali soils. You can never know how good peaches taste until you pick them fully ripened from your trees. Plant largely of midseason and late varieties, but include enough of the earlier and very late kinds to provide an ample supply throughout the season.

One of the most important problems in commercial peach growing is the selection of varieties that ripen at a time when the markets you expect to supply are not likely to be overstocked. Bulletins on commercial districts, varieties, ripening dates, etc., can be obtained from the U. S. Department of Agriculture at Washington, D. C. Anyone who plans to grow peaches commercially should first make a careful investigation of varieties as well as location, site and soil, cultural methods, etc.

PEACH TABLE

Varieties in seasons.	Flesh.	Size.	Quality.	Days ahead of Elberta.
Very Early—				
Mayflower.....	White—Semi-cling.	Medium.....	Fair.....	50
Early—				
Greensboro*.....	White—Semi-free..	Medium.....	Fair.....	40
Arp (Beauty).....	Yellow—Semi-cling.	Medium.....	Good.....	38
Early Rose.....	Red & White—cling	Medium.....	Very good	35
Eureka.....	White—free..	Large.....	Good.....	30
Carman*.....	White—Semi-free..	Large.....	Good.....	24
Lola**.....	White—Free.....	Large.....	Very good	24
Midseason—				
Alton.....	White—Semi-free..	Large.....	Good.....	18
Hiley.....	White—Free.....	Large.....	Good.....	15
Champion*.....	White—Free.....	Medium.....	Very good	15
Illinois.....	White—Free.....	Large.....	Very good	15
Belle (of Georgia)*.....	White—Free.....	Large.....	Very good	8
J. H. Hale.....	Yellow—Free.....	Very largest.	Very good	5
Early Elberta.....	Yellow—Free.....	Very large..	Good.....	3
Elberta Cling.....	Yellow—Cling.....	Very large..	Good.....	2
Elberta.....	Yellow—Free.....	Very large..	Good.....	Days after Elberta
Late—				
Crossley**.....	Yellow—Free.....	Medium.....	Very good	5
Late Crawford.....	Yellow—Free.....	Very large..	Very good	8
Late Elberta.....	Yellow—Free.....	Very large..	Very good	20
Very Late—				
Krummel.....	Yellow—Free.....	Large.....	Good.....	30
Heath Cling*.....	White—Cling.....	Large.....	Good.....	40

*Hardest varieties.

RIPENING DATES OF ELBERTA

Conn.....	Middlesex and New Haven Counties	Sept. 5-15
N. Y.	Southeast.....	Sept. 1-10
N. Y.	West.....	Sept. 10-25
N. J.	S. W. Central.....	August 20-25
N. J.	East Central.....	Aug. 25-Sept. 10
Ohio....	South.....	Aug. 10-Sept. 1
Ohio....	North.....	Aug. 25-Sept. 25
Indiana....	Southeast.....	August 25-30
Indiana....	Central.....	September 15
Illinois....	South.....	August 10
Illinois....	East Central.....	August 25-30
Illinois....	West Central.....	September 1-15
Mich....	Southwest.....	September 15-25
Pa....	Southeast.....	Aug. 15-Sept. 15
Md....	East.....	July 30-Aug. 10
Md....	West.....	August 10-20
W. Va....	Northeast.....	Aug. 20-Sept. 5
N. Car....	Central.....	July 20
Georgia....	Central.....	July 1-10
Ky....	North Central.....	August 10-15
Ala....	Southwest.....	July 1
Tenn....	Southeast.....	July 25
Ark....	Southwest.....	July 10
Missouri....	Oregon County.....	July 28-Aug. 8
Missouri....	Howell County.....	August 10-15
Kansas....	Northeast.....	Aug. 20-Sept. 10
Oklahoma....	Central.....	Aug. 1-20
Texas....	Northeast.....	July 4-15
Idaho....	Canyon County.....	Aug. 28-Sept. 12
Colo....	Mesa County.....	September 1
N. Mex....	Southeast.....	August 1-15
Wash....	South Central.....	August 15-20
Oregon....	Northeast.....	August 25-30
Cal....	Solano County.....	July 24-Aug. 8
Cal....	Amador, Eldorado, Placer Counties	Aug. 4-Sept. 4



ALTON—Early Midseason.

ALTON A large, handsome white-fleshed peach of good quality. Tree is hardy and productive. Blooms early. Grown mostly in Middle West and South.

(Arp) BEAUTY The earliest good yellow peach. Round-oval in shape, heavily blushed with red, excellent quality. Deserves a place in every home orchard. Tree is vigorous, productive, hardier in bud than the average.

BELLE (of Georgia) An unusually handsome large peach. Creamy-white blushed with red, good quality, better than Elberta. Tree is large, open headed, hardy. Prefers a Southern climate.

CARMAN A very general favorite in nearly every peach section as it succeeds in a great variety of soils and withstands trying climates. Tree is an excellent grower, bears abundantly, remarkably hardy in wood and bud. Fruit is brilliant red, splashed with darker red on creamy-white background; very good quality for its season.

CHAMPION An exceptionally high quality, attractive, hardy white peach. It has a peculiar honeyed sweetness. It is not a good shipper but the tree is almost perfect in every respect on good peach soils. Ideal for home use and local markets.

CROSBY
(**Yellow Freestone**)
(**Late**)

Most notable for hardiness of tree and bud. Tree is rather small grower but unusually vigorous, healthy and productive. Fruit is medium size, not attractive, but very delicious for dessert or culinary use.

EARLY ELBERTA
(**Yellow Freestone**)
(**Midseason**)

Very large, high quality, lemon-yellow peach; originated in Utah. Flesh is fine grained, sweet; for home use and local market. Tree is a strong grower of Elberta type. A good bearer under favorable conditions; moderately hardy.

EARLY ROSE
(**Red and White Clingstone**)
(**Early**)

The best early peach. Flesh is tender and has a delicious, rich, sweet flavor; dark-red color, almost like a cherry—qualities lacking in other early peaches. It has a fragrant aroma beyond all comparison with any other varieties. The tree is a very hardy and dependable bearer. It is a medium grower, rather stocky, and, while in no sense a dwarf, it never attains a great size like the Belle or Carman.

ELBERTA
(**Yellow Freestone**)
(**Midseason**)

The most widely and extensively planted commercial peach. Very large golden-yellow, nearly covered with crimson on the sunny cheek; flesh is firm, rich yellow, fair quality. Tree is a moderately vigorous grower, very productive, yielding large quantities of uniform, highly colored fruit, mediocre in quality; moderately hardy in wood and bud, but its adaptability to all soils, its prolific bearing, large size, splendid shipping qualities, and the tendency to color well before fully mature have made it the great market peach.

ELBERTA CLING The best yellow clingstone; especially (**Yellow Clingstone**) fine for canning, preserving and pickling; large, yellow, round, good for dessert. Tree is a strong, vigorous grower, hardy and productive.

EUREKA
(**White Freestone**)
(**Early**)

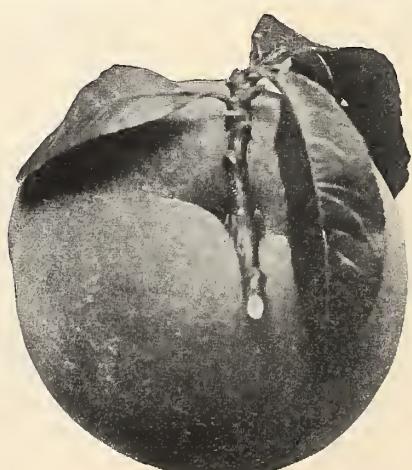
Very large for an early peach; good quality; white with a distinct red blush on one side; round; flesh is tender, but firm. Tree is above the average size, spreading, semi-hardy to hardy and exceptionally productive.

GREENSBORO
(**White Semi-Freestone**)
(**Early**)

A leading early white peach, owing to its showy fruits and its large, vigorous, healthy trees which are early-bearing and exceptionally prolific. It thrives in a great variety of soil and climates. Somewhat inferior in quality; a good shipper and keeps long.

HEATH CLING—Best for Pickles and Preserves.

EARLY ROSE—The Best Early Peach.



J. H. HALE (Yellow Freestone) (Midseason) Largest size; yellow overlaid with bright carmine; flesh deep yellow, firm and fine grained; delicious flavor. Ripens three days to a week ahead of Elberta, colors up a week before fully matured and its solidity and firmness permit leaving it longer on the tree, making picking season longer. The tree is of the Elberta type, but more stocky, drooping and branching. "The flesh of the J. H. Hale is firm and heavier and the peaches will ship and keep longer than those of the Elberta."—Peaches of New York.

Some commercial growers state that it requires greater care and attention in pruning, spraying, cultivation and fertilizing than the Elberta.

HEATH CLING (White Clingstone) (Very Late) The best of all peaches to preserve or pickle whole. The tree is unusually large, healthy and hardy. Exceptionally good keeper, has been known to keep from October to December.



EARLY ELBERTA—Fine for Home Use.

HILEY (White Freestone) (Midseason) Hiley is the earliest commercial freestone white-fleshed peach; better in quality than most of its competitors; very closely resembles its parent, Belle of Georgia. Flesh is firm, sweet, good quality; a very good shipper; often requires several pickings. Tree is medium size, open, spreading. Productive, but not particularly hardy nor vigorous.

ILLINOIS (White Freestone) (Midseason) A very handsome large peach of good quality for home use and local markets.

KRUMMEL (Yellow Freestone) (Very Late) A large, round, peach, one side a little larger than the other. A rich golden yellow, blushed with carmine. Flesh is yellow, tinted red at the pit. Firm, melting, rich, subacid, and refreshing. Good quality. A good keeper and shipper. The tree is hardy, healthy and a strong, vigorous grower. It ripens about October 1st in Southeast New Mexico and in Central Washington and about September 15th in Central Oklahoma. It is hardier and more productive than Salway. "The latest peach grown at the station. Ripened October fifth."—Ohio Experiment Station, Wooster, Ohio, Bulletin No. 170.

LATE CRAWFORD (Yellow Freestone) (Late) Its high quality, scarcely equalled in richness of flavor, its adaptability to a wide range of soil and climatic conditions make this old variety exceptionally desirable for the home garden. The trees are vigorous, hardy and healthy and the fruit large and very handsome, but it had to give way to Elberta as a commercial variety because it lacks in productiveness and is somewhat tardy in coming into bearing.



The J. H. Hale Peach.

LATE ELBERTA (Yellow Freestone) (Late) A large, high quality, golden-red peach, of better quality than Elberta and ripens about twenty days later, when there are no other good yellow kinds. The Late Elberta is a distinct variety which we found fruiting near our nurseries. We have never been able to determine whether it was new or a named variety propagated in the past and lost sight of.

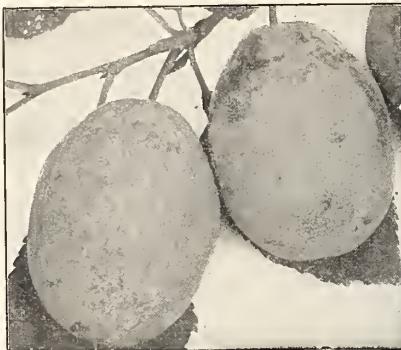
LOLA (White Freestone) (Early) Best peach of its season; higher quality than Carman; larger, better shipper than Champion; hardier in bud than either. Beautiful creamy white peach, speckled and splashed with carmine; good shipper. Tree large, vigorous, upright, spreading; hardy and productive; a dependable bearer.

MAYFLOWER (White Semi-Clingstone) (Very Early) Earliest peach to ripen. Good size and quality for such an early variety. Its popularity is due to its extreme earliness. Creamy white with dark splashes of red; very juicy; fruit ripens unevenly through a long period, making it especially good for home use. Tree is vigorous, upright, spreading and bears very young.

"The stock I handled for you last spring was the best stock I ever saw in my ten years' experience in dealing with nursery stuff."—C. G. Randell, Marshall County, Kans., Sept. 20, 1922.



Elberta.



Italian Prune—The Best “Prune.”



Shropshire Damson—Great for Preserves and Marmalades.

PLUMS

PLUMS are especially fine for eating fresh, for jellies, preserves and marmalade, and unexcelled for canning and drying. Various plums are adapted to great differences in temperature, moisture and soil. Some varieties will thrive wherever apples or peaches can be grown. Out of two thousand varieties which are now or have been under cultivation, we offer twelve, chosen for hardiness, productiveness, quality and adaptability to wide variations in climate. Most of them bear the third or fourth year. One of the best fruit trees for the home garden and offers great capacity for development commercially.

"Plums of Wild Goose, DeSoto, and Miner types as a rule lack the quality desired in fruit for home use. Most of them are coarse and have an unpleasant flavor. Though these plums are popular, hardy and productive and more extensively planted than other types, they are excelled by the Damsons and Domestics for all purposes for which plums are used." * * * * * * * "Three dependable and satisfactory plums for Missouri are one of the Damsons, Lombard and German or Italian Prune."—Circular No. 13, Missouri Fruit Experiment Station.

ABUNDANCE (*Prunus triflora*) (Early) A pinkish-red Japanese plum, covered with a thin bloom. Medium size, a roundish oval. Flesh is yellow, tender, melting, unusually juicy and refreshing; sweet, aromatic; quality good to very good. Tree is vigorous grower, large, hardy and very productive. Adaptable to wide diversity of soils and climates, bears heavily and regularly. Poor shipper and keeper; much subject to brown rot; matures unevenly and drops too readily as it ripens. Should be picked before quite ripe; dropping and rot are thus avoided and flavor is better. Blooms early.

AMERICA
(P. Munsoniana and
P. triflora) |
(Midseason)
An improved Gold, originated by Burbank; a beautiful waxen yellow with currant-red cheek. Flesh is yellow, juicy, sweet, very good for cooking. The tree is a large, strong grower, spreading, open top; extremely hardy and productive, and succeeds where others fail. Considering its parentage, phenomenally free from rot. Midseason bloomer.

BURBANK A dark red, roundish
 (*P. triflora*) Japanese plum; better quality and shipper and less susceptible to brown rot than Abundance. The flesh is a deep yellow, firm, very juicy, aromatic, and sweet; quality good to very good. The tree is healthy, not quite as fast a grower as Abundance; flat, spreading top. A week later than Abundance. Blooms very early.

ENDICOTT (*P. triflora*) **(P. domestica)** (*Midseason*) Endicott combines the high quality of the European with the hardiness and adaptability of the Japanese. One of the sweetest, juiciest plums. It averages very large in size, roundish, slightly flattened at the end; dark garnet-red, with a faint bloom. Flesh is a light yellow, firm and rich. Mr. Endicott, the originator, of Southern Illinois, wrote of this plum:

"I have fruited it side by side with Red June and Gold, and I think it is worth more than both of them put together. In fact, it is the best plum I have ever seen for our low elevation and changeable climate. It generally ripens here about the Fourth of July. By thinning and spraying them with self-boiled lime-sulphur, I have grown them two inches in diameter.

FRENCH DAMSON (P.*insitia*) (Late)] Largest and best quality of the Damsons. Dull purplish-black color. Flesh very juicy, tender,

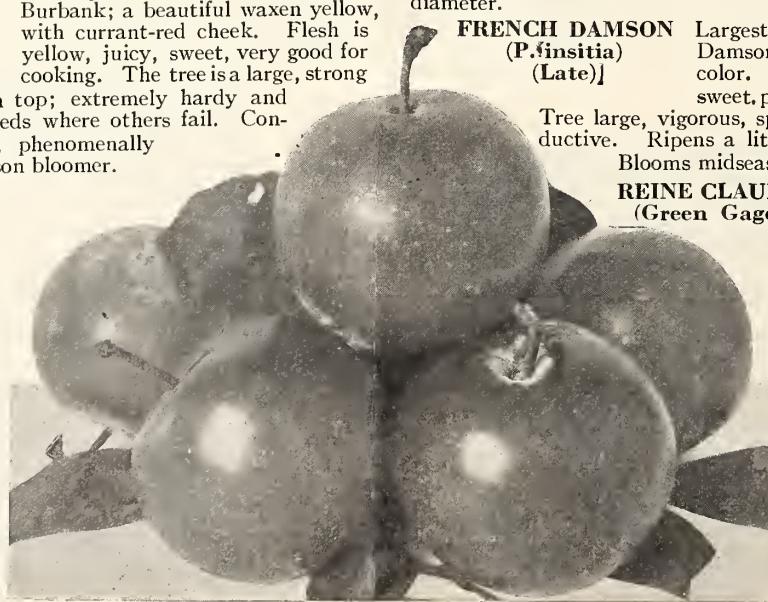
Tree large, vigorous, spreading, hardy and productive. Ripens a little later than Shropshire. Blooms midseason.

REINE CLAUDE A large, roundish,
(Green Gage) oval plum; light

(P. *domestica*) green
(Midseason) ish-yellow

yellow.
Firm, sweet, mild, rich
flavor, very juicy,

aromatic; good to very good in quality. Tree is of medium size and vigor, productive, and hardy. Thrives best on high, sandy soils. Chief defects: Susceptible to sun-scald and fruit cracks if showers occur at ripening time. Bloom's midseason. Should be in every home garden.



Endicott (Mammoth Gold) Plums.



Wild Goose—Productive—Grows where others fail.



America Plum—Very Hardy.



Endicott Plum.

ITALIAN (Prune) The Italian, or Fellenburg, is the largest, best and one of the most widely grown of all prunes. Long, oval shape, rich purplish-black; almost dark wine color, overspread with a thick blue bloom. It is a very large size, flesh firm, yellow, aromatic, juicy, rich, sweet and very good to best quality. Fine flavor for dessert and cooking. Keeps and ships well. Apt to suffer from dry or hot weather. Succeeds everywhere except in the more Southern states. Late bloomer.

LOMBARD The most widely planted plum in America, (*P. domestica*) noted for hardiness and dependability; (*Midseason*) adaptable to widely different soils and climates, unusually healthy, very productive, regular bearer and fruit is comparatively free from attacks of the curculio. Medium to large size and oval shape; purplish-red or reddish-violet color, overspread with a thin bloom; easily sold because of its beauty. It is inferior in quality, but does very well for cooking, canning and preserving. Blooms midseason.

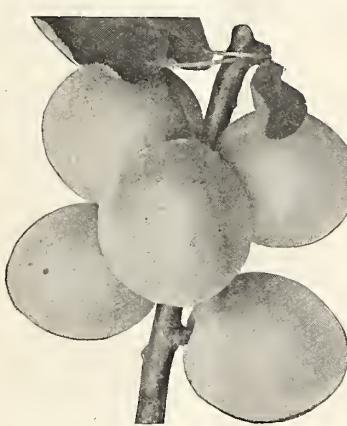
OMAHA A large, round, brilliant, coral-red plum. (*P. triflora* and *P. Americana*) Flesh is firm, yellow, juicy and sweet. Tree is a strong, vigorous grower, hardy and productive.

RED JUNE A large garnet-red, heart-shaped Japanese plum, pointed at tip. Flesh is light yellow, meaty, sweet, peculiarly aromatic; quality fair to good. Tree is a large, vigorous, upright, spreading grower; very hardy and productive. **Should be planted with other varieties for the purpose of cross-pollination.** Abundance and Burbank are good pollenizers for this variety. Comparatively immune to curculio and brown rot. Usually ripens a week before Abundance. Blooms early.

SHROPSHIRE DAMSON The most widely planted Damson. (*P. insititia*) Oval shape; purplish-black covered with a thick bloom; flesh is juicy, firm, tender, sprightly and pleasant. Tree is strong, vigorous grower, quite hardy. A standard for productivity and reliability in bearing; fair for eating when fully ripe or after a light frost; one of the best for culinary purposes. Fruit ripens late over a long season. Blooms late.

WILD GOOSE An old-time favorite; bright red; medium size; flesh is yellow, very juicy, tender, melting, very sweet except slightly acid next to the seed; quality fair to good. This is a very large, strong, flat-topped grower; hardy. Good shipper and keeper; comparatively free from brown rot and curculio. The Wild Goose is a native plum and should be planted near other plums of this class for pollenization. Blooms medium early.

THE APRICOT is one of the most delightfully luscious fruits grown, when eaten fully ripe and fresh from the tree. It is remarkable that such a rich and beautiful, golden, sweet fruit is not planted more, especially since it ripens just after the early cherries and before the best early peaches. Apricots succeed in many localities and will stand more winter cold than peaches, although the bloom is more apt to be injured by spring frosts. The soil should be well drained, the subsoil as well as the surface. A northern or western slope is best so the opening of the buds will be retarded and the danger of frost damage lessened.



Superb Apricot.

SUPERB The best apricot for (**Freestone**) Eastern planting; medium size; roundish oval; smooth, light salmon color, with numerous red dots; flesh is yellow, firm, sub acid; very good. The tree is a very hardy Russian type, a vigorous grower; very productive; latest-blooming apricot; is adapted to peach regions.



A Drive Through an Orchard
in Full Bloom.



Anjou Pear Orchard—Pear Trees Thrive in Sod.



PEARS

THE PEAR is one of the highest quality fruits. All pears should be picked before entirely ripe, especially Garber and Kieffer, otherwise the flesh around the core becomes coarse. Pears may be grown wherever apples succeed. They prefer heavy clay and clay loams and on such soils the growth is slower and there is less danger of blight. As a rule, growth should not be stimulated, certainly not with manure. The pear tree is an upright grower and thrives in sod, making it one of the best fruit trees for yard planting.

STANDARD PEARS

"Standards" are pears that are propagated on pear roots.

ANJOU Fruit is large, heavy, greenish-yellow with dull red (Fall) cheek often russeted. Very good quality and keeps late. Tree is hardy, long-lived, productive. Tardy in coming into bearing.

BARTLETT The leading commercial variety, one of (Late Summer) the most popular for dessert and canning. Large, clear yellow with blush on sunny side. Flesh is white, fine-grained, juicy and sweet. Tree is vigorous, very productive, hardy, bears young.

FLEMISH BEAUTY Large, pale yellow, mostly russeted. (Early Fall) Very juicy and sweet. One of the choicest when well grown.

GARBER Large, brownish-yellow with red on sunny side; (Fall) flesh firm, granular, juicy and poor quality. Used for canning. Succeeds farther South where other varieties do not thrive.

KIEFER Large, yellow russeted; flesh white, rather coarse, (Winter) poor quality. A market and kitchen variety that succeeds farther South where other varieties fail. If picked when it takes on a slight yellow tint and placed in boxes in a dark place to ripen, they are very good to eat out of hand and superior to most pears for canning. Tree hardy, very vigorous, resistant to blight. Blooms early.

SECKEL The standard of excellence for quality. Small, (Fall) yellowish brown with russety red cheek; should be first choice for family orchard. Slow grower, dependable, productive and very hardy, notably free from blight. Bears about fourth year. Blooms midseason.

PICKING, RIPENING AND STORAGE DATES FOR PEARS

Varieties.	IN NORTHERN STATES.			IN SOUTHERN STATES.		
	When to pick	When ripe enough to eat.	Latest cold storage limit.	When to pick.	When ripe enough to eat.	Latest cold storage limit.
Summer: Lincoln.....	July 29-Aug. 18	Aug. 29-Sept. 8	Sept. 15-25	July 19-Aug. 8	Aug. 19-31	Sept. 5-15
Bartlett.....	Aug. 4-Sept. 17	Sept. 10-20	Oct. 1-15	July 24-Sept. 7	Sept. 1-10	Oct. 1-15
Flemish Beauty.....	Aug. 6-Sept. 20	Sept.				
Fall: Garber.....	Sept. 4-26	Oct. 6-20	Dec. 1-15	Aug. 26-Sept. 16	Sept. 26-Oct. 10	Nov. 10-25
Anjou.....	Sept. 15-20	Oct. 20-30	Dec. 15-25	Sept. 5-10	Oct. 10-20	Nov. 25-Dec. 25
Duchess d'Angou- lème.....	Sept. 16-25	Oct. 20-30	Dec. 15-25	Sept. 6-15	Oct. 10-20	Nov. 25-Dec. 5
Seckel.....	Sept. 17-Oct. 3	Oct. 6-15	Dec. 15-25	Sept. 7-23	Oct. 15-25	Nov. 25-Dec. 5
Winter: Kieffer.....	Sept. 26-Oct. 7	Oct. 25-Nov. 4	Jan. 1-15	Sept. 16-27	Oct. 15-25	Dec. 1-5
Winter Nelis.....	Oct. 3-20.	Nov. 6-15	Feb. 1-Mar. 1	Sept. 23-Oct. 10	Oct. 15-26	Jan.-Feb.

"It gives me great pleasure to tell you of the wonderful success I have had from the trees, etc., bought from you. The trees were all planted in January, 1920, and this year I had the pleasure of supplying myself and several neighbors with perfect plums from the trees of the America variety. The Elberta peach trees are great and from one I am sure that I gathered more than 2½ bushels of perfect fruit. The apple trees are doing as fine as could be wished and have such spurs as to make me think that I will have apples next year.

I want you to know that the St. Regis raspberry is a success in this section as I have gathered berries from the first year in which they were planted. The Montmorency cherries are doing splendidly and though they had many blooms last year did not set any fruit this year. I understand, though, this is to be expected.

I can't be too praiseworthy of the trees and plants, and most every day tell some friend where to get their trees from for 100% success. It is a pleasure to write you the above and to thank you for the splendid trees which you sent me."—Ben H. Jones, Madison County, Miss., Sept. 18, 1922.

LINCOLN Large, yellow, quality good to very good, (Summer) similar to Bartlett, but more resistant to blight. Succeeds farther south than Bartlett can be grown. It has stood the severest tests of intense, moist, summer heat, and low altitude of the climate at Lincoln, Illinois, where it was originated by W. E. Jones. Comes into bearing early and bears heavy crops annually; very hardy. Blooms midseason.

WINTER NELIS The latest, best keeping pear. Can be (Winter) held in cold storage until spring. Medium-sized, roundish, yellow, russeted pear with a short, heavy neck. Flesh fine-grained, sweet, aromatic, very good quality. Tree is hardy, has wide adaptability, and is a regular bearer. A slender, straggly grower. Blooms late.

"Just a few words to let you know the nursery stock, apple trees, peaches, grapes, and currants, I received from you are growing fine. I am more than pleased with the stock and service. Your replacement policy is great but the way my stock is growing all you will have to do will be to fill new orders."—John Gilroy, Boone County, Ill., Sept. 17, 1922.



KIEFFER—The Most Dependable, Vigorous Pear; Succeeds Where Others Fail.

DWARF PEARS

THE pear can be grown more satisfactorily as a dwarf than other fruits. It is especially good for planting in small yards and gardens, but it is also profitable commercially. It is propagated on quince roots, which makes the tree a slow, dwarfish grower, and less subject to blight than standard pear trees. The fruit is the same as that of standard trees.

They come into bearing young, often in the second or third year are very productive. "It is the common belief that dwarf pears are short-lived but this is not necessarily true."—Prof. W. L. Howard. They can be set close together, usually 10 to 15 feet apart; hence they are especially valuable for home gardens and small yards, where they are ornamental as well as useful. They should be planted 4 or 5 inches deeper than they stood in the nursery row. Since they should never be more than 12 feet tall it is often necessary to remove $\frac{1}{2}$ to $\frac{2}{3}$ of the annual growth late each winter.

DUCHESS Best when grown as a dwarf. The largest of the good pears; white flesh, rich, good **d'ANGOULEME** quality. Tree is hardy, upright grower, productive and long lived. (Fall)

ANJOU, **BARTLETT** and **SECKEL** can all be furnished as dwarf trees. For descriptions, see Standard Pear.

QUINCE

THE Quince is the ideal fruit for flavoring preserves, jellies, marmalade and cooked fruit. Trees thrive on well-drained, fairly rich soil, are long-lived, and, being small, dwarfish growers, can be planted closely. They are especially suited for yards and gardens.

ORANGE The most widely grown quince. Golden color, large, roundish shape, short neck. Can be kept until January or February. One of the best for all purposes.

REA'S (Mammoth) Rich, orange color, roundish, pearshape, tapering neck. Very good quality for flavoring other fruits and for baking; almost fuzzless.

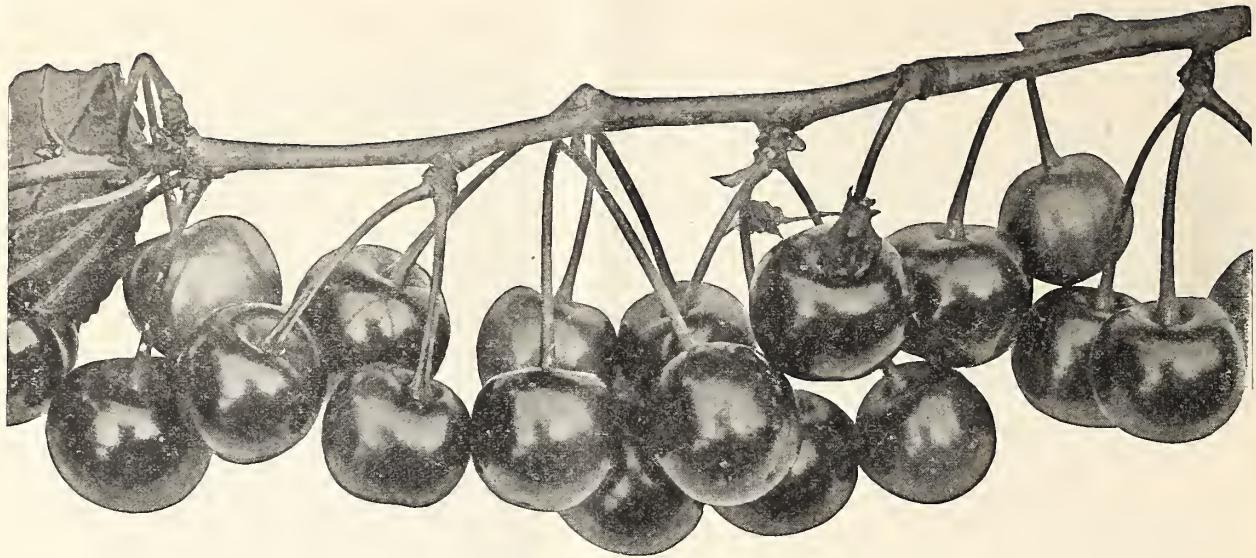
"Every tree, plant and shrub you shipped us last spring has made satisfactory growth and we are more than pleased with them."—C. P. Gernandt, Douglas County, Nebr., Sept. 20, 1922.



Orange Quince—Easily Grown. Ideal for Jellies and Marmalades.

VAN DEMAN Unusually large, often weighing one pound or more; rich orange color; round, chunky shape; heavy, firm flesh; especially good quality; bears young, often second or third year on fertile ground.

"The grape vines, apple trees and rhubarb roots bought from you last spring are all living and looking fine—100%—don't see where could have done better."—T. T. Turner, Pulaski County, Ill., Sept. 16, 1922.



CHERRIES

YOU may buy cherries, fresh or canned; but if you ever tasted any fresh and ripe from the tree, you will surely want a few trees of your own. Possibly you cannot grow sweet cherries, since they thrive only in favored localities, preferring a sunny, equable climate and a deep, dry, gravelly or sandy loam; they also require particular attention and care, especially in spraying. But the sour cherry can be grown almost anywhere. It is notably hardy and quite adaptable to different soils and climates, preferring a moderately heavy loam. The soil must be well drained. It grows under neglect better than any other fruit tree. The three leaders—Early Richmond, Montmorency and English Morello—ripen over a season of nearly forty-five days.

The sour cherry makes a fine ornamental windbreak, gives great satisfaction in the home garden and offers great possibilities for profit for the grower who supplies local markets.

The Oregon Fruit Experiment Station Bulletin 116 states in part as follows:

"All varieties of the Sweet Cherry tested are self-sterile" "Among those studied, Black Republican, Black Tartarian and Waterhouse seem to be the most efficient pollenizers for this group of varieties." (This group includes Napoleon—often called Royal Ann.)

BLACK TARTARIAN Most widely planted sweet cherry
(Sweet)

east of the Mississippi. Beautiful, lustrous, purplish-black when ripe. Medium size for sweet cherry. Flesh purplish-red, firm, tender, pleasant flavor, sweet and mild; very good quality. The tree is a very large, vigorous, upright grower; adapts itself to widely different soils and climates. Very productive and regular bearer. Comparatively free from brown rot. Early.

EARLY RICHMOND The favorite early sour cherry, and next to the Montmorency the most popular of all cherries. Fruit is medium size, roundish shape, flattened at the end; flesh light color, tender, and sprightly. A good canner, but not so firm as Montmorency. Tree is medium size, vigorous, upright, spreading, productive and long-lived. Ripens about a week earlier than Montmorency.

MONTMORENCY The most widely and most numerously planted cherry. It is the most productive and regular bearer. Fruits early before ripe—a distinct advantage for shipping. The fruit is roundish, plump, flattened at the end, and a beautiful glowing red. It hangs in clusters, making picking easy.

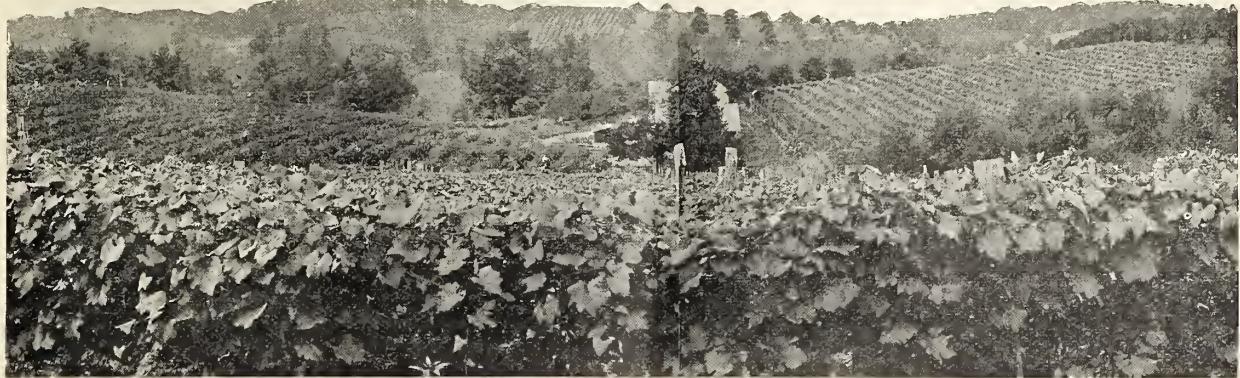
The fruit does not crack or rot even in very hot, rainy weather. It hangs on without dropping after it is dead ripe. The flesh is rich, sprightly, and pleasant; flesh is reddish color, tender, and melting, but firm. A good shipper and a good canner. Does not mash down in the box.

The tree is the largest, most vigorous grower of all the sour cherries. Round, spreading, upright head, especially hardy and productive; a very reliable cropper. Bloom is hardy and seldom injured by late frost or severe winter freezes. The Montmorency can be grown in practically every part of the country except the low lands of the extreme South. Adapted to great variety of soil and climate and succeeds well under adverse conditions. Ripens in Southwest Missouri first week in June.

ENGLISH MORELLO Fruit is small, dark red colored, (Sour) very sour, but loses much of its sourness if left on the tree until fully ripe. First-class for canning and preserving. Stands lower temperature and severer drought than any of the other leading varieties. Tree is small, round-headed with drooping branches. Bears young. Very productive and hardy but not as healthy nor adapted to many different kinds of soil as Montmorency or Early Richmond. Especially good for gardens where a small-growing tree is desired.

NAPOLEON The best yellow cherry. Often sold and grown (Sweet) as Royal Ann. Best of the sweets for dessert and canning. Very particular as to soil and climate. Apt to crack in wet weather, and somewhat susceptible to brown rot. Nevertheless, it deserves first place among sweet cherries for home and commercial planting. It is an attractive yellow, with a bright red cheek; very large; long, heart-shaped; firm flesh. Meaty, crisp, mild and sweet; high quality. Tree is a hardy, vigorous, upright grower, with strong, sturdy limbs. Very productive and bears young.

"It affords me genuine pleasure to express my appreciation of your splendid stock. Last year I ordered a small quantity of trees from you and about the same number from two other nurseries for the purpose of comparison and yours are decidedly superior in the root system, and that is where I judge a tree."—W. H. Van Nort, Franklin County, Mo., Sept. 16, 1922.



GRAPES

THE GRAPE is the surest, most dependable of fruits—hardy, vigorous, productive—and begins to bear the second or third year. There are varieties adapted to nearly all soils and climates and they will produce good crops on land that is too rough and stony for farm crops. Every yard or garden should have a few grapevines. They take little room, are quite ornamental trained over arbors, fences, walls or buildings, and they also produce good fruit in spite of neglect or unfavorable conditions. Of course, they respond quickly to care and attention; especially do they require severe pruning. Some varieties are sterile and must be planted near others for cross-pollination.

AGAWAM The most widely grown of the Rogers Hybrids.

(Red) Bunches are large. Berry is large, rich, sweet, and aromatic. Vine is vigorous and self-fertile, but somewhat susceptible to mildew, and does not yield well in some localities. Ripens after Concord and can be kept much longer, and improves in flavor. Seems to prefer clay soil. Of the red grapes, it is the easiest grown and most dependable. For home use and market. Keeps in storage till midwinter. Blooms rather late.

BARRY A Rogers Hybrid—one of the best black grapes. **(Black)** ripening soon after Concord. Berries are large, of delicate, sweet flavor, above the average in quality; will keep in common storage into February. Vine is vigorous, hardy and productive but susceptible to mildew. Flowers open midseason and are sterile.

BRIGHTON A handsome high quality red grape; clusters **(Red)** and berries are large. Vigorous, productive, dependable, adaptable to various soils but often subject to mildew. Ripens before Concord. It is self-sterile, and must be planted near other varieties. Deteriorates rapidly in quality after ripening. Blooms rather late.

CAMPBELL EARLY Bunch and berry are large; high **(Black)** quality when mature, but colors before ripe and often marketed in unripe condition; good keeper and shipper. Vine is productive, hardy but not adapted to wide range of soils. Ripens about two weeks before Concord. Blooms midseason.

CONCORD The most widely-planted grape, known to all. **(Black)** Superior in hardiness, productivity, and regularity in bearing and in ability to withstand disease and insects. Good size of bunch and berry. Very handsome in appearance. It is not a good keeper nor high in quality, although the fruit is sprightly and refreshing. It is the leader for making grape juice. No other grape has been able to compete with it on the market, as it can be produced so cheaply. Blooms midseason.

DELAWARE The standard of quality; the best table grape. **(Red)** Unusually hardy; adapted to wide variation of soils and conditions, and usually bears abundantly. Ripens a few days earlier than Concord. Ships and keeps well and more immune to black rot than other commercial varieties. Its faults are: Small size of vine and berry, slow grower, and foliage susceptible to mildew, which can be controlled by spraying with Bordeaux mixture. It succeeds best in deep, rich, well-drained, warm soils, and should be planted more closely than most other varieties. It com-

mends the highest prices, and is valuable North and South for both home use and market. Blooms rather late.

DIAMOND Seldom surpassed in quality and beauty. It is **(Green)** the hardiest, most productive and vigorous of the green grapes, although Niagara bears more heavily in most localities. A good keeper and shipper. It deserves a high place among the best for commercial and home vineyards; unfortunately often sold as Niagara. Medium size; green, with tinge of yellow, but less yellow than Niagara. Can be grown as widely as Concord. Blooms midseason.

HERBERT A Rogers Hybrid. Vigorous, fruitful and hardy **(Black)** except in the extreme North. One of the handsomest high quality black grapes. Ripens with Concord, but keeps long—till midwinter. One of the choicest black grapes for home garden and for commercial growers who supply discriminating markets. It must be planted with other varieties for cross-pollination. Blooms midseason,

MOORE EARLY The most widely planted early commercial grape. **(Purple-Black)** Ripens two or three weeks earlier than Concord. Fair to good in quality and does not keep well, but it has the dependability, hardiness and other qualifications which have made the Concord the leading commercial grape. It is best described as an early Concord. It should be planted on rich, well-drained, loose soil, but succeeds on rocky, hilly ground, where others fail. Blooms midseason.

NIAGARA The most widely planted green grape. Larger **(Green)** bunches and berries than Concord, as good, or better in quality, but inferior to Diamond. Productive, vigorous, adaptable; not as hardy as Concord. Ripens about with Concord. Keeps fairly well. Flavor not at its best unless fully ripe. Blooms midseason.

WILDER A Rogers Hybrid not as high quality but more **(Black)** reliable than Barry and Herbert. Vines are vigorous, hardy and fairly productive. Medium sized clusters of large berries of good quality, ripening about with Concord; keeps and ships fairly well. Should be planted with other varieties for cross-pollination. Blooms midseason.

WORDEN Much better quality, larger berries and bunches **(Black)** and handsomer than Concord and is equally healthy, hardy, vigorous, and productive, but often more particular as to soil. Its chief fault is a tendency to crack. Ripens a week to ten days earlier. It does not keep long, but is especially desirable for the home garden and for nearby markets.



Snyder.



Mercereau.



Early Harvest.

BLACKBERRIES

CITY people do not know the really delectable flavor of fully ripe blackberries, for, even for local markets, they must be picked before they are fully ripe and they do not ripen in transit. The cultivated varieties are much juicier and larger and better in quality. They are profitable for local markets, but cannot be shipped long distances. They are much appreciated from the home garden for eating fresh, for canning and preserving, and for cordials. They are easily grown and bear abundantly and early the second year. The best blackberry land is a deep, fine, sandy loam with a large supply of humus.

EARLY HARVEST (Early) Glossy black, medium size, good quality; ships well. Compact, dwarf grower, very productive in the South, but not very hardy, requiring protection in the North. Very susceptible to rust.

ELDORADO (Midseason) Medium to large, jet-black, sweet and melting, very good quality; very hardy, vigorous and productive. An extra good keeper; slightly susceptible to rust. Season early to medium, and long. One of the best varieties in most sections east of the Rocky Mountains except the extreme South.

MERCEREAU (Midseason) Very good quality and size. A strong grower, hardy and productive; susceptible to rust; drought-resistant. One of the best for northern part of Central Western and Eastern states. Season medium and short.

McDONALD (Very Early) McDonald is a blackberry-dewberry hybrid, combining the firmness and quality of the blackberry with the size, earliness and productiveness of the dewberry. It is large, oblong, and very good quality, equaling the best late varieties in flavor and juiciness. It outyields any known variety of blackberry and ripens about two weeks before Early Harvest. The bush is drought-resistant and such a vigorous grower that it should be planted in rows eight to ten feet apart. The vines trail on the ground the first season, but after that send up long canes of unusual length. It is not hardy and is usually self-sterile. Grown in Texas, Oklahoma and Missouri. Doesn't do well north of the latitude of Washington, D. C.

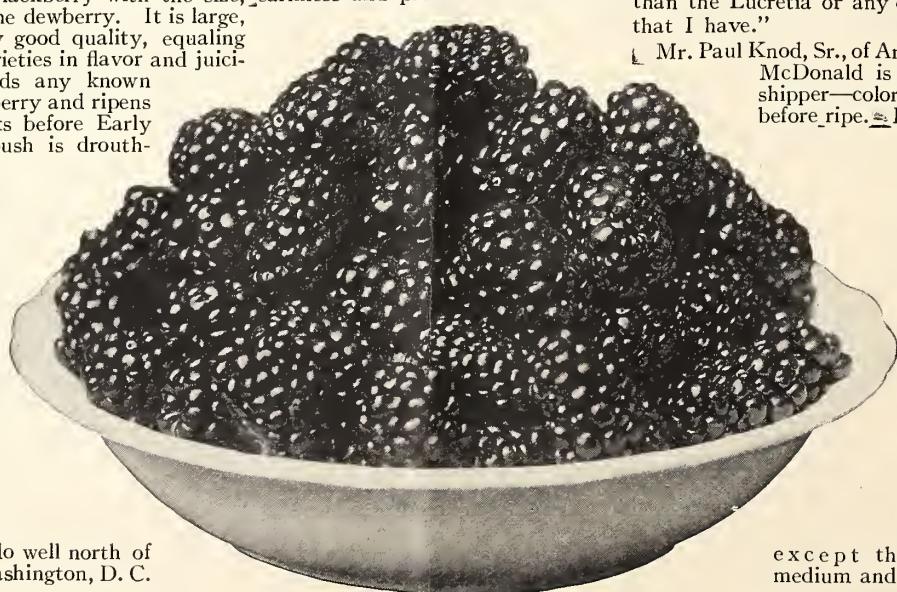
Important—Plant every fourth row to Lucretia Dewberry, as McDonald requires a pollinator to develop perfect berries.

Prof. L. R. Johnson, the well-known horticultural writer of Cape Girardeau, Mo., says: "I feel that in the McDonald there has arisen the greatest of all the Blackberry family, the most valuable of its group, both as a market and family berry. The McDonald is the most productive of all. Its berry averages larger than those of any other variety, being twice the size of Early Harvest. It brings higher prices than blackberries. It is an extremely vigorous grower, surpassing in this respect all of our standard varieties. Notwithstanding we had an all-summer drought here, the McDonald brought its great crop to perfection and then made its usual vigorous growth. Its berries will hang on for days after ripening in good condition. I found the last berries the largest I had ever seen of either blackberries or dewberries. Its berries begin to ripen a few days before the Harvest, as early as any wild dewberry (or earlier), which is a week or more earlier than the Lucretia or any other tame variety that I have."

Mr. Paul Knod, Sr., of Arkansas says: "The McDonald is very firm, a fine shipper—colors up several days before ripe. I start shipping about May 15th. My average yield is 300 to 500 crates per acre.

SNYDER (Midseason)

Medium size, only fair quality, but very hardy and productive. Does not rust but is susceptible to dry weather. Grown in all parts of the United States except the South. Season medium and short.



McDonald—The Earliest and Heaviest Bearing Blackberry.



Cumberland Raspberry—Very Productive, Extra Good Quality.



Ranere (St. Regis) Raspberry—Particularly Adapted to the South.

RASPBERRIES

THIS tempting fruit may be had the second year and amply repays proper care. They succeed on a wide range of soil types, but require ample moisture and the soil should be well drained. Good air drainage is also required. Red varieties are usually set 2 to 3 feet apart in rows 6 to 8 feet. Some plant 5 feet apart each way, reducing hand cultivation. Black raspberries are usually set 3 to 4 feet apart in rows 8 feet distant. Raspberries and Blackberries are planted early in the spring.

CUMBERLAND (Black) (Midseason) The most widely planted black raspberry because of its productivity and quality. Berries are extra large, fine and sweet. It is usually hardy.

CUTHBERT (Red) (Late) The best red because of its superior quality and flavor. Berries are large, rich crimson, firm and one of the best for canning. Plants are moderately hardy, adapted to sandy loam but do well on wide variety of soils.

KANSAS (Black) (Early to Midseason) Widely planted because of large, firm, sweet, well-flavored berries and strong, prolific canes.

RANERE (St. Regis) (Red) (Everbearing) Bright red, small to large berries. Canes are hardy, prolific, healthy, drought-resistant. Bears very early; after the old canes have borne the young canes begin bearing and produce until frost. Very thorough cultivation is necessary to keep the suckers down, otherwise the berries of the first crop will be small and no second crop may form. Long grown in New Jersey where, usually five-sixths of the crop is borne in the spring, the rest in autumn.

DEWBERRY

THE DEWBERRY is closely related to the blackberry; fruits on last year's canes but trails on the ground and flower clusters are small. They should not be planted on wet soil but succeed on clay loams and in coarse, sandy soils. For good crops the soil should be fertile or plant food supplied. Some growers use about 500 pounds of cottonseed meal, others 10 to 15 tons of stable manure to the acre. Some use about 500 lbs. per acre of potash and phosphoric acid, analyzing 2-10-8 where nitrogen is not needed.

The Dewberry is grown by hundreds of acres in North Carolina and New Jersey. It is also grown in Maryland, Missouri, Texas, Michigan, Colorado and to some extent in most of the other states. In some Northern States, Iowa and Minnesota, the canes must be protected during the winter, usually by covering with 2 or 3 inches of earth which must be removed in the spring.

A 12-year-old field of Lucretia dewberries in North Carolina set in 1903 averaged 100 crates (of 32 quarts each) per acre since coming into bearing.

LUCRETIA (Very Early) The best known and most widely planted dewberry. The berries are large, long, firm and good quality, very sweet if left on the vines a day or two after they would be picked for shipping. Best for shipping of all dewberries. The canes are very vigorous and productive, should be staked or trellised. Can be grown over walls or rocky slopes. Usually planted 3 feet apart in rows 4 to 6 feet apart. Expense of cultivation is less if set 5 feet apart each way.



Lucretia, Best of all Dewberries.

"All the trees are living. I am well pleased with your methods and with the stock received."—Mrs. J. T. Evans, Muskogee County, Okla., Sept. 16, 1922.

"I received 100 McDonald blackberries from you last spring. They all grew although put into the ground when very wet and being subject to the very dry summer which has followed our wet spring. All are looking fine and I can speak only in the highest terms of your business."—Mrs. E. M. Sherrill, Wabash County, Ill., Sept. 20, 1922.



Oregon Champion—The Most Productive Gooseberry.



Perfection Currant.

GOOSEBERRIES—CURRANTS

CURRANTS and gooseberries are used chiefly in making jams, jellies, preserves, pies, tarts, etc. They contain a large amount of pectin, which is necessary for jelly making. They do best in the northern half of the United States and they may be successfully grown on well-drained highlands farther South. They succeed best in cool, moist soils, well cultivated and enriched, and require a good mulch through the summer. Gooseberries are grown slightly farther South than Currants, suffering less from hot, dry weather. Protection from the sun is often afforded by planting where buildings or trees will give partial shade. Bear second or third year. Federal Quarantine No. 26 prohibits shipments to points west of Minnesota, Iowa, Missouri, Arkansas and Louisiana.

GOOSEBERRIES

DOWNING The most widely grown variety; medium to large; pale green; excellent for home use and quite profitable for market. Vigorous, and very productive; rarely attacked by mildew and notably resistant to aphis.

HOUGHTON A widely grown variety. Small, dark red. Unusually productive, more subject to mildew than Downing.

JOSSELYN Large; reddish green; very productive and vigorous but mildews in some localities. Very good quality.

OREGON (Champion) A large green berry, season late. Bush is very productive, rarely attacked by mildew. An improved variety which combines the large size and high quality of the Downing with the productiveness and vigor of the Houghton; similar to Downing in appearance and quality. Bears young and heavily.

CURRANTS

LONDON MARKET (Midseason to Late) Particularly valuable for Northern climates; extensively planted in Michigan. Medium to large, dark red, very acid. Clusters compact. Bush upright, somewhat resistant to borers and diseases.

PERFECTION (Midseason) Large, bright red berry in long, compact clusters; sprightly, subacid. Bush upright, canes break easily. Vigorous and productive.

RED CROSS (Midseason) A strong grower; quite productive. Large, long clusters of large, light red berries, very easy to pick; quality good to best; not so good for jelly as others. Bush somewhat spreading.

WHITE GRAPE The best white currant. Large clusters of white or golden-green berries, mildly acid in flavor; slender but productive grower.

GARDEN ROOTS

RHUBARB (Pie-plant) Is hardy in all parts of the temperate zone. Like asparagus, rhubarb comes at an early season when most needed and appreciated.



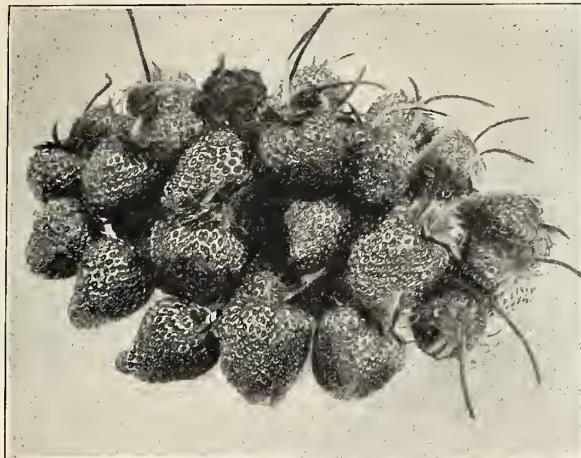
Reading Giant Asparagus.

HORSE-RADISH Is used as a table relish and as a condiment to promote appetite and invigorate digestion.

ASPARAGUS One of the most delicate, wholesome and appetizing products of the home garden. (Farmers' Bulletin 829, "Asparagus," may be had free of charge from the U. S. Department of Agriculture, Washington, D. C.)

Washington A new strain originated by Prof. Norton of the U. S. Department of Agriculture. (Circular 7 "Washington Asparagus"). The most resistant to rust and is also superior in color, size, flavor and market desirability. Green tips.

Reading Giant Highly resistant to rust. The stalks are large, tender and the plants are vigorous and productive. Green tips.



Senator DUNLAP—Fine for Home Use.



AROMA—One of the Best Shippers

STRAWBERRIES

STRAWBERRIES are the first fruit to ripen in the spring. Fresh or preserved, they are delicious and healthful, and help out on the grocery bill. They offer quicker returns to the grower for local or distant markets than any other fruit, but like blackberries and raspberries, they reach their highest quality when fully ripened before picking, which is not the case when grown for market. They do well on almost any soil if well drained, deeply worked, and well fertilized. Standard varieties produce good crops the next spring after planting. Three or four varieties will supply fresh berries over a long season.

Do not plant in ground that has just been in sod; if you do the white grubs will probably destroy the plants. Be particularly careful to set plants the correct depth, the crowns just level with the surface, and firm the soil about the roots.

The Everbearing will produce the first summer and fall. The second year they bear in the spring and continue fruiting until severe frost comes. They are particularly fine for the home garden. Fifty to one hundred plants set about a foot apart in beds four to five feet wide will supply a small family with berries throughout the season.

Farmers' Bulletin 901, Everbearing Strawberries, U. S. Dept. of Agriculture, November, 1917, says: "The plants are very hardy, their foliage is very resistant to disease and under favorable conditions they continue to produce berries until hard frosts occur. These characteristics make them especially suitable for the home garden."

STANDARD VARIETIES

All the following varieties are self-fertile and can be planted alone.

AROMA A richly colored, large berry, deliciously aromatic in flavor, and an excellent shipper. Ripens over a long season. Its chief merits are resistance to disease and productiveness of the plants, and attractiveness, firmness and high quality of the fruit. Best adapted to silt or clay soils. Plants make runners very freely. A leading variety in many strawberry-growing sections. 125,000 crates, 24 quarts each, were shipped out of Neosho in 1922, practically all Aroma. They were sent to New England, Canada, Colorado, Texas and numerous other states.

KLONDIKE The berries are medium size, deep crimson, (Midseason) quality fair to good. Foliage is very resistant to disease; plants make runners freely. The berries ripen evenly and are firm enough to ship long distances. The leading market variety of the Southern States.

(Lady) THOMPSON A large, handsome berry of very good (Early) quality. The plant is vigorous and productive. A good shipper.

OZARK (Early) Dark red, excellent quality berry, large (Extra Early) for their season. The plant is vigorous and productive.

(Senator) DUNLAP (Midseason) One of the most widely planted varieties. Noted for dependability and productiveness. A medium sized handsome berry, deep glossy red, exceedingly juicy, very good quality. Plants are very hardy and drought-resistant; make runners very freely. Commences to bloom medium early and lasts a long time. Adapted to any type of soil and wide variation in climate. Grown chiefly for home use and local markets.

SON'S PROLIFIC (Late) (Early in Canada) A cross between Aroma and Bubach. Attractive, hardy, productive, and a good shipper. Larger, more pointed than Aroma. Will not thrive on rocky soils where Aroma succeeds.

EVERBEARING

PROGRESSIVE This is the most widely grown and most successful of the Everbearing varieties. The berries are medium size, dark crimson with dark red flesh, and delicious in quality. The plant is unusually healthy, vigorous, very hardy and productive. It needs a rich soil amply supplied with moisture. A crop failure is impossible—if an early frost catches one set of blossoms another is formed immediately. The first season the blossoms and runners should be cut off until about the middle of July. The ideal berry for the home garden.



Spirea Van Houttei. Makes a Very Graceful, Free-growing Mass.

SHRUBS

SHUBS are the most important ornamentals and give quickest results. They are invaluable as specimens; in groups or continuous borders; as screens against objectionable views or to secure privacy; as barriers or windbreaks; for flowering effects, for attractiveness of foliage or fruit. They relieve the harshness where house and lawn meet and the sharpness of corners.

Planting Distances. In Masses—Low growing shrubs are planted from 2 to 2½ feet apart; medium growing are planted from 2½ to 4 feet apart; tall growing are planted from 3 to 5 feet apart.

In Hedges—Low clipped, plant 6 inches apart; for 1 to 4 feet tall, plant 8 to 12 inches apart; for 4 feet up, plant about 18 inches apart.

Planting Season. All plants can be moved with greatest success during their dormant period. Trees and shrubs become dormant after the buds have ripened and the leaves withered or dropped.

This condition is reached in the autumn and with most ornamentals too late to supply northern customers in time for fall planting. In southern states planting can be done in late fall and even in winter. Iris and Peonies should be planted early in the fall and can be moved safely about September 1st.

Spring planting should be done as early as the weather and conditions of the ground will permit.

Pruning. When transplanting shrubs, the tops should be cut back one-half to two-thirds.

Spring or early flowering shrubs are pruned soon after blossoming, cutting just above a bud.

Late flowering shrubs should be pruned in late winter or early spring.

Dead wood should be removed entirely. If the shrub has all top with no foliage at the base some of the old wood should be cut out at the base.

The aim should be to preserve the natural grace and form of the shrub. Don't trim off the ends of all the branches. Cutting off the tips stimulates growth of the side branches and trimming the side branches stimulates the tips.

Shrubs whose fruits attract birds are: Japanese Barberry, Dogwood, High Bush Cranberry, Japan Bush Honeysuckle, Prairie Rose, Ibotia Privet, Rosa Rugosa and Snowberry.

FOR MASSES AND BORDERS

Medium Growing:
Dogwood Siberian
Deutzia P. of R.
Hydrangea A. S.
Hydrangea P. G.
Japan Quince
Prairie Rose
Privet
Rosa Rugosa
Spirea Van Houttei
Weigela Rosea

Low Growing:
Deutzia Lemoinei
Globe Flower
Japanese Barberry
Snow Garland
Snowberry
Spirea, Crimson

Tall Growing, for Background:

Althea
Golden Bell
High Bush Cranberry
Japan Bush Honeysuckle
Lilac
Mock Orange
Snowball

THRIVES IN STIFF CLAY

Japanese Barberry
Dogwood
Weigela Rosea
Roses
Spirea
Snowball
High Bush Cranberry
Sugar Maple

FOR DRY UPLAND SITUATIONS

Japanese Barberry
Deutzia
Privet
Spirea
Snowberry
Snowball
High Bush Cranberry
Prairie Rose

FOR ATTRACTIVE FRUITS

Japanese Barberry
Dogwood Siberian
Rosa Rugosa
High Bush Cranberry
Privet
Snowberry

FOR ATTRACTIVE TWIGS

Dogwood Siberian (red)
Globe Flower (green)

FOR AUTUMN LEAF

Japanese Barberry
Dogwood Siberian
California Privet
Amoor River Privet
American Elm
Norway Maple
Privet, California and Amoor R.
Sugar Maple
Boston Ivy (vine)
Japanese Clematis (vine)
Hall's Honeysuckle (vine)

ENDURES SHADE

Japanese Barberry
Deutzia Lemoinei
Dogwood
Hydrangea A. S.
Privet
Mock Orange
Snowberry
Snowball
High Bush Cranberry
Hall's Honeysuckle (vine)
Weigela Rosea

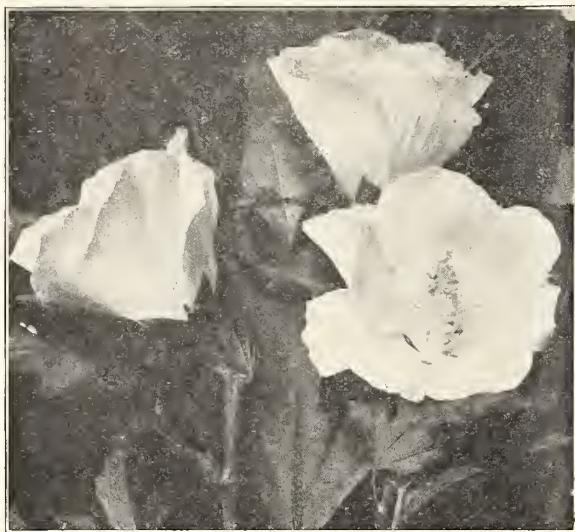
One authority, The Garden Press of Davenport, Iowa, in the Landscape Series says: "Experience enables us to ascertain that in an average planting of good nursery stock, well packed, shipped with reasonable dispatch and carefully planted and cared for, a ten per cent loss is an exceptional maximum to expect—assuming that the species selected have been chosen in all sincerity for the purpose and location at hand."

We recognize the need of knowing what, where, when and how to plant and therefore send free to every purchaser of ornamentals our "How to Beautify Your Home Grounds" but have to make a nominal charge of 10 cents per copy to others.

"The order received from you last spring was very satisfactory and grew all right. The material ordered from you has always been O. K. and I can recommend you heartily."—P. D. Aurandt, Blair County, Pa., Sept. 18, 1922.

"The nursery stock which I purchased from you was better than I expected, being the best rooted plants I ever saw. All are living and have made good growth."—Mrs. Mollie Wilkinson, Benton County, Ark., Sept. 18, 1922.

Common Names of Shrubs.	Blooming Period.	Color and Size of Bloom.	Height and Form of Bush.	Comments.
Althea (Hibiscus Syriacus) Rose of Sharon.	July September	White, bell-shaped, large.	8 to 12 ft., compact, upright.	Hardy. Used singly, in masses and hedge.
Barberry, Japanese (Berberis Thunbergii).	April May	Small flowers, red berries.	3 to 5 ft., dense, upright.	Best low hedge. Very hardy. Endures partial shade. Borders, masses, foundations.
Bechtel Double-flowered Crab (Pyrus Ioensis B.)	May	Large, pink, rose-like.	15 to 20 ft. round or oval.	Used as specimen.
Deutzia Lemoinei.	May June	White, small, bell-shaped.	3 to 4 ft. dense, spreading.	Valuable for flowers, borders and facing masses.
Deutzia Pride of Rochester (Deutzia Seabra Plena).	May June	White, double in large clusters.	6 to 8 ft., upright, stiff.	Blooms two weeks later than D. Lemoinei. Fast growing.
Dogwood Siberian (Cornus Alba Siberica).	June	Blood-red bark, blue berries in fall.	6 to 10 ft., upright, bushy.	Thrives in shade and most any soil. Hardy.
Golden Bell (Forsythia Intermedia).	April May	Golden yellow flowers.	6 to 10 ft., upright arching branches.	Earliest blooming shrub. Flowers and leaves very ornamental.
High Bush Cranberry (Viburnum Opulus).	May June	White flowers, clusters of red berries.	8 to 12 ft., upright, spreading.	Endures shade; hardy. Fine for autumn effects.
Honeysuckle Japan Bush (Lonicera Morrowii).	May, June	White flowers, red berries.	6 to 10 ft., upright, compact.	Very fast growing. Hardy.
Hydrangea, Hills of Snow (H. Arborescens Sterile).	June July	Large clusters of pure white flowers.	4 to 6 ft., upright, spreading.	The hardiest Hydrangea. Endures shade.
Hydrangea, Large-flowered (H. Pan. Grandiflora).	August September	Large clusters of white flowers nearly foot long.	6 to 8 ft., dense, rounding.	Thrives on light sandy soil. Prefers sun.
Japan Quince (Cydonia Japonica).	April May	Scarlet flowers.	6 to 8 ft., dense, spreading.	Prefers sun. Attractive autumn foliage. Good for hedge.
Globe Flower (Kerria Japonica).	May August	Bright yellow.	3 to 6 ft., slender drooping branches.	Endures partial shade. Branches light green in winter.
Prairie Rose (Rosa Setigera).	July, August	Large, deep rose fading to white.	3 to 6 ft., dense, spreading.	Thrives in heavy clay.
Rosa Rugosa, Alba.	May	White.	4 to 5 ft., dense, upright.	Thrives in sandy soil and clay.
Snowball (Viburnum Opulus Sterile).	May, June	Large balls of little white flowers.	8 to 12 ft., upright.	Grows almost anywhere.
Snowberry (Symphoricarpos Racemous).	June July	Small, inconspicuous, white flowers. White berries.	3 to 6 ft.	Endures shade. Berries hang all winter.
Spirea Van Houttei.	May June	Small white flowers almost covering the foliage.	6 to 8 ft. Arching branches.	The best shrub. Thrives in sandy and clay soils.
Spirea, Crimson Everblooming (S. Anthony Waterer).	June till frost.	Bright crimson.	2-3 ft.	Prefers fertile soil and sunny exposure.
Snow Garland (Spirea Thunbergii).	April, May	Clusters of small, white flowers.	3-6 ft., dense, graceful, slender.	Attractive foliage.
Syringa or Mock Orange (Philadelphus Coronarius).	May June	Fragrant, creamy white.	8 to 12 ft., upright.	Hardy. Endures shade. Fast grower.
Weigela Rosea (Diervilla Florida).	May June	Large, white to deep rose pink.	6 to 8 ft., upright.	Rather hardy. Endures shade. Fast grower.



Althea, Often Called Hibiscus or Rose of Sharon.

ALTHEA (Rose of Sharon) Large, single, bell-shaped, (*Hibiscus Syriacus*) white flowers somewhat resembling the hollyhock; makes compact, heavy, upright growth, eight to twelve feet tall; blooms in mid-summer; hardy. Good for planting singly, in groups or masses, or as a hedge.

BARBERRY, JAPANESE Very useful for edging borders (*Berberis Thunbergii*) or masses and especially for foundation screen in front of porches. The best small hedge plant, very hardy; endures shade. Rich, green foliage, brilliant red in autumn and dark red berries that hang on late in fall. Grows about 3 feet tall. Will thrive on stiff, clay soil.

BECHTEL DOUBLE FLOWERED CRAB Large, pink, (*Pyrus Ioensis Bechtelli*) rose-like flowers in May. Grows 15 to 20 feet tall; almost round or oval; hardy. Used as specimens. Does well in light, sandy soil.

DEUTZIA, LEMOINEI Dense, spreading shrub, upright branches, loaded with clusters of small white flowers early in the spring. More vigorous and with showier flowers than *Deutzia Gracilis*. Grows three to four feet tall; hardy, endures shade.

DEUTZIA, PRIDE OF ROCHESTER (*Deutzia Scabra*) Upright shrub, taller than *Deutzia Lemoinei*, grows 6 to 8 feet tall, with white flowers in clusters. Blooms in spring about two weeks after *Deutzia Lemoinei*.

DOGWOOD SIBERIAN (*Cornus Alba Sibirica*) Attractive foliage, bright red bark, and blue berries. Attractive red leaves in autumn and quite ornamental for winter effects. Grows 6 to 10 feet tall; endures shade; does well in light, sandy soil and heavy clay. Small flowers. Very hardy.

GOLDEN BELL (*Forsythia Intermedia*) Golden yellow flowers; bloom very early—April. Deep green leaves appear after flowers and are very ornamental. Tall growing, 6 to 10 feet, with slender, erect or arching branches; very hardy. *Forsythia Suspensa* is the weeping kind, often planted on banks and slopes.

HIGH BUSH CRANBERRY (*Viburnum Opulus*) Resembles common Snowball, but has a flat bloom three or four inches across, followed by a cluster of bright scarlet berries which hang on until spring. Desirable for late fall and winter effects. Grows eight to twelve feet tall; endures shade; hardy. Does well on light, sandy soil and heavy clay.

HONEYSUCKLE, JAPAN BUSH (*Lonicera Morrowii*) Very rapid - growing, dense, round shrub; bears profusion of small typical honeysuckle flowers early in May and June, that are followed by red berries. Its fragrant flowers, showy fruits and fine foliage make it one of the most popular shrubs. Grows 6 to 10 feet tall; hardy.

HYDRANGEA ARBORESCENS STERILIS (Hills of Snow) Huge, white dense balls of many small flowers, blooms in midsummer; grows 4 to 6 feet tall; earliest blooming; hardiest of the Hydrangeas. Endures shade.

HYDRANGEA (H. Pan. Grandiflora) Immense, conical, white flower heads a foot long. Blooms late in summer, lasts until frost; grows 6 to 8 feet tall. Does well on light, sandy soil.

JAPAN QUINCE (*Cydonia Japonica*) Handsome, glossy foliage, with abundant scarlet flowers in early spring, are highly decorative, especially adapted for borders of shrubberies and for low ornamental hedges. Grows 6 to 8 feet tall. Stands pruning well. Requires sunny position to bloom abundantly; hardy.



Hydrangea Paniculata Grandiflora.



Deutzia, Pride of Rochester

GLOBE FLOWER (*Kerria Japonica*) Attractive for its bright yellow flowers early in June and for its light green branches in winter. Does well in partial shade. Grows 3 to 6 feet tall.

PRAIRIE ROSE A dense, spreading bush, grows 3 to 6 feet tall. Flowers are large, one and a half inches across; single, deep rose fading to white. For planting near walks and drives, or mixing with shrub groups and for massing on hillsides. Very hardy, easily grown.

ROSA RUGOSA ('Alba') This is a true Rose, often planted in the extreme North for its flowers, but its greatest value is as a shrub, as it has unusually attractive dark green foliage and red seed pods. Blooms early in May and intermittently all summer. Flowers are large white single roses, three inches or more across, fragrant, followed by clusters of large reddish seed pods. Bush, four to five feet tall, dense, upright growth. Use as hedge or shrubbery mass; extremely hardy. Does well on light, sandy soil and heavy clay.

SNOWBALL An old-time favorite; large (*Viburnum Opulus Sterile*) round balls of little white flowers; grows 8 to 12 feet tall. Blooms profusely in May or June. Valuable in shrubbery borders and desirable as specimens. Endures shade. Does well on clay soil.

SNOWBERRY Small pink flowers in (*Symporicarpos Racemosus*) June, followed by large clusters of snow-white berries, which hang until winter; grows three to six feet tall. Very hardy. Endures shade; does well on sandy soil.

SPIREA The best of the Spireas and the greatest (*S. Van Houttei*) favorite everywhere. Its graceful, drooping branches, laden with small, round clusters of dainty little white flowers, are truly beautiful. Grows 6 to 8 feet tall. Flowers in spring. **If you could plant only one shrub, that one should be Spirea.** For shrubbery border, hedge or massing to hide the foundation of the house. Succeeds on light, sandy soil and heavy clay; hardy.

SPIREA, CRIMSON EVERBLOOMING A very free flowering, compact shrub with (*Spirea, Anthony Waterer*) bright crimson flowers, blooming from June until frost; grows 2 to 3 feet tall. Thrives best in moist, fertile soils and sunny exposures. For edging shrubberies and for low hedge.



Japanese Rose, Globe Flower. (*Kerria Japonica*.)

SNOW GARLAND A graceful, low-growing shrub, (*Spirea Thunbergii*) branches rather slender and drooping, grows 3 to 6 feet tall. Small leaves and innumerable small white flowers in April and May.

SYRINGA, OR MOCK ORANGE Most fragrant white (*Philadelphus Coronarius*) flowers, with yellow stamens; resembling orange blossoms; blooms in May or early June. Upright growth; grows 8 to 12 feet tall; a great favorite. Very hardy, endures shade. Desirable as specimens or in groups with other shrubs or to screen unsightly views.

WEIGELA ROSEA Rose-colored flowers in great profusion; (*Diervilla florida*) trumpet-shape, like honeysuckle; borne (Rose-colored) in long, graceful sprays, during May and June. Grows 6 to 8 feet tall. Useful as specimens and desirable for groups and masses. Endures shade. Thrives in most soils.



Weigela Rosea (D. Florida).



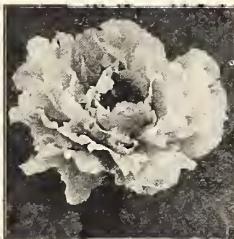
Syringa, or Mock Orange (*Philadelphus Coronarius*).

PEONIES

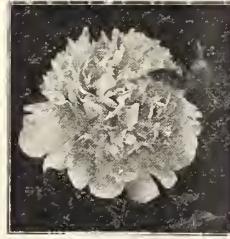
PEONIES are the most widely planted and popular of all hardy flowers. They are easy to grow but prefer rich, deep soil and sunny position; well adapted for massing in beds. They are ideal for cut flowers and can be held in storage a month. Best planted in the fall; we can ship about September 15th.



Couronne d'Or (Crown of Gold). One of the Largest Whites.



Jeanne d'Arc (tri-color).



Duc de Wellington.

"The trees purchased from you last spring have made a very good growth."—D. W. Dienst, Montgomery County, Kans., Sept. 18, 1922.

"Last spring I set a small orchard with trees from your nursery and as I have had considerable experience in growing trees will say that I never saw finer, more vigorous trees."—Sam Kivett, Cass County, Missouri, Sept. 19, 1922.

"Although it was very late in the season when I received the blackberry plants, on account of the strong, healthy plants 90% of them did well and are now in fine condition. I am entirely satisfied."—Wm. L. Grayson, Chatham County, Ga., Sept. 19, 1922.

COURONNE D'OR
(Crown of Gold)
(Late)

DELACHEI
(Late Midseason)

Pale pink. Large, compact, rose type; fragrant; medium height; strong, thick stems. One of the most beautiful pink peonies.

DUCHESSE DE NEMOURS
(Early)

Cup-shaped bloom, broad guard petals of white and narrower central petals of sulphur color with oftentimes a marking of green; very fragrant; free bloomer.

DUC DE WELLINGTON
(Late Midseason)

Ivory white, creamy center; very large and double; fragrant.

FELIX CROUSSE
(Midseason)

Very brilliant, ruby-red; large, fragrant. Free bloomer.

FESTIVA MAXIMA
(Medium Early)

White, usually central petals tipped with carmine; very large, double with spicy fragrance. Best of the whites.

JEANNE D'ARC
(Midseason)

Delicate pink, with yellow-white center, spotted with carmine. Fragrant, profuse bloomer.

LA SUBLIME Crimson, fine, full, fragrant, tall.

MADAME LEBON Bright cherry pink; very large.
(Midseason)

MEISSONIER Brilliant reddish-purple, medium size, well formed bloom; odor pleasant; tall vigorous grower; free bloomer.

NIGRICANS Dark crimson; compact bloom.
(Midseason)

PRINCE IMPERIAL Dark red; very large.
(Moderately late)



Festiva Maxima. Fragrant; the Favorite Peony.

IRISES

IRISES are often called hardy orchids because of the richness and beauty of the flowers. They vary in height from 1 to 3 feet, are very easy to grow, and blossom early in exquisite shades of many beautiful colors. Can be planted in the fall (September) or spring.

Black Prince blooms very early and is about gone before the others start. Then comes Perfection and Fairy, and following them in close succession come Queen of May, Celeste, Flavescens, Madame Chereau, closing with Sans Souci, Oriantalilis and Snow Queen.

BLACK PRINCE Purple-lilac and rich velvety (American Black Prince) black; very early, stem 24 inch.



Sans Souci.

CELESTE Pale azure blue; strong branching grower; one of the best; stem 30 inch.

FAIRY White, delicately suffused with soft blue, beautiful; very fragrant; stem 30 inch.

FLAVESCENS A delicate shade of soft yellow; stem 2 to 3 feet.

MADAME CHEREAU White, frilled with clear blue; stem 2 to 3 feet.

ORIANTALIS Narrow bladed leaves with small flowers of exquisite blue; slender stems; 1 to 2 feet.

PERFECTION Dark velvety purple and lavender-blue; handsome; stem 30 inch.

QUEEN OF MAY Lilac with rose tint; stem 2 to 3 feet.

SANS SOUCI Canary yellow and crimson-brown; short stem, about 2 feet.

SNOW QUEEN Narrow bladed leaves with small white flowers with touch of gold near center. Slender stems, 1 to 2 feet.



Flavescens.

CLIMBING VINES

BOSTON IVY (A. *Tricuspidata Veitchii*) Bright, attractive foliage turning to crimson in the fall; clings firmly even to smooth surfaces; hardy.

CLEMATIS, JAPANESE (C. *Paniculata*) Bright foliage with countless little star-shaped white flowers, very fragrant; blooms late. Support on trellis; grows ten to fifteen feet.

HONEYSUCKLE, HALL'S (Lonicera *Japonica Halliana*) Shiny green foliage; pure white, trumpet shaped flowers with sweet perfume; used to cover fences, embankments, arbors, etc. Blooms in late fall. Hardy. Thrives in heavy soil. Endures shade.

TRUMPET VINE (Trumpet Honeysuckle) (Bignonia *Radicans*) Long, trumpet-shaped, orange-colored flowers, beautiful foliage, especially good for covering walls, fences and embankments. Hardy.

WISTERIA, JAPANESE (W. *Multijuga*) Beautiful foliage, long clusters, pea-shaped, purple flowers; makes a heavy vine; grows very tall.



Madame Chereau.



Honeysuckle.



Trumpet Vine—Splendid to Cover Walls and Fences.

LILACS

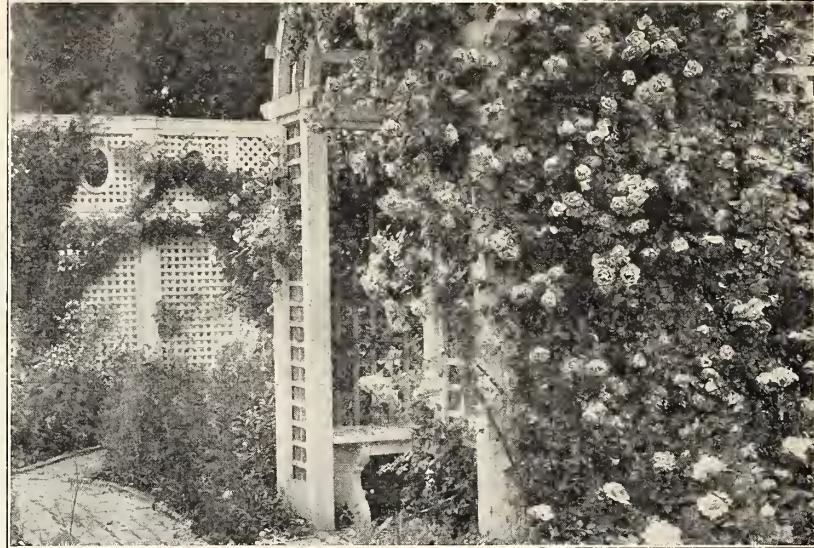
LILAC (*Syringa vulgaris*) The lilac is deservedly (Old-fashioned Common Purple) popular because of its fragrance and beauty, hardiness and dependability. Useful for hedges, in shrubbery borders, in groups and as specimens. Very hardy. Require sun for best results. Grows 8 to 12 feet.

VIOLETS

VIOLETS Single, purple, fragrant, hardy.



Maman Cochet. The Hardiest Tea Rose.



Climbing American Beauty Rose.

ROSES

NOTHING can take the place of the rose; practically every home has room for at least a few. They prefer a good fertile soil, well drained. The Hybrid Perpetuals (H. P.) must be pruned severely in late winter or early spring, cutting back to 4 or 5 eyes, to secure larger blossoms and for continuous bloom. For large quantities of smaller flowers, only one-third to one-half of the shoots should be cut off. Teas and Hybrid Teas should be pruned the same way only in cold climates later in the spring about the time growth starts.

Hardy Climbing roses should be pruned just after blooming, removing one-third to one-fifth of the wood. The new wood produces the flowers and the old wood the foliage.

For leaf-eating insects, spray with arsenate of lead, 2 ounces of paste or 1 ounce of powder to 10 quarts of water.

For aphids or other sucking insects, use 40 per cent nicotine sulphate, one teaspoonful to 1 or 2 gallons of water in which one-half ounce of soap has been dissolved. Every insect must be covered.

For mildew and other fungous diseases spray with potassium sulphid, one ounce to 3 gallons of water, adding 3 ounces of any good mild soap.

ANNIE MILLER (Pol. H.) Brilliant shining, pink flowers, medium size, constant bloomer. Good as a bedding rose, for borders and along shrubbery masses. Hardy.

CLIMBING AMERICAN BEAUTY (H. T.) Bright scarlet rose, borne singly, resembling American Beauty parent in form and color. Unlike most climbers, it is suitable for cut flowers. Hardy, healthy, blooms early and off and on during the summer.

CONRAD F. MEYER (Hy. Rugosa) (Bedding and Shrubbery) Silvery pink, double. Flowers early, continuing throughout the season; very fragrant. For hedges and the lawn. A splendid bedding rose for the extreme North, where others are too tender. Very vigorous and hardy. Will not mildew.

DOROTHY PERKINS (H. Wich.) (Climber) Beautiful shell-pink flowers; bright glossy foliage. More graceful grower and has larger flowers than Crimson Rambler. Hardy. Should have plenty of room.

EXCELSA (Red Dorothy Perkins) (Climber) A radiant dark red rose, very large clusters. Outgrows most of the ramblers, has remarkably clean foliage, is hardy and comparatively free from disease.

GENERAL JACQUEMINOT (H. P.) (For Cut Flowers) Bright, shining, scarlet-crimson; fragrant. "General jack" is a celebrated all-around rose; very hardy; blooms early.

GRUSS AN TEPLITZ (H. Ben.) Dazzling scarlet; fragrant; (For cut flowers, shrubs or hedge) one of the best deep red roses for continuous bloom; hardy.

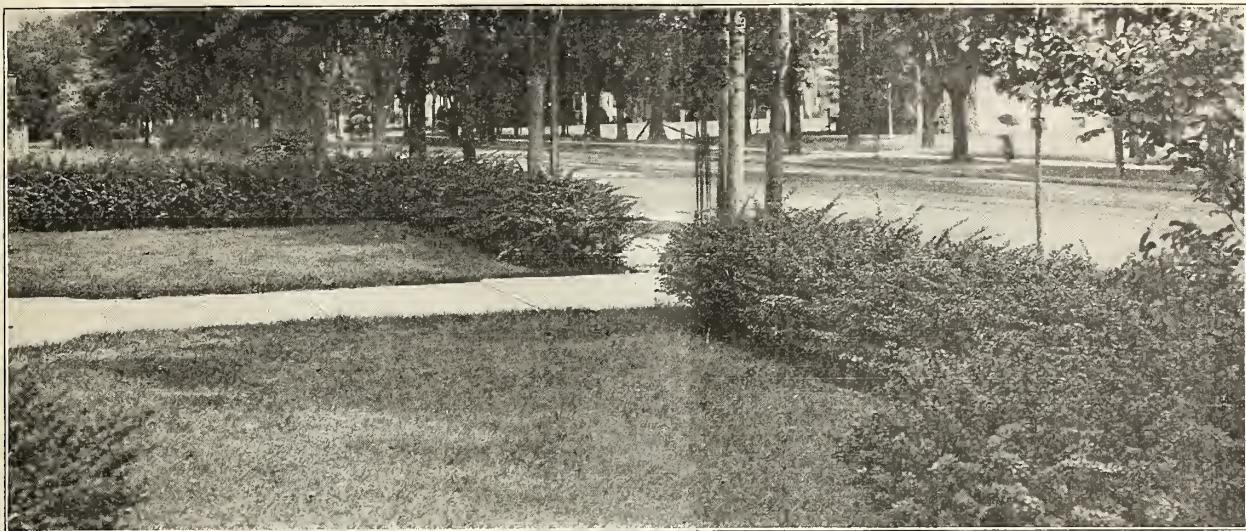
MAMAN COCHET (T.) The best of the tea roses; moderately hardy; rosy, coral-pink; large, exquisitely tapering buds, very fragrant; continuous bloomer. North of St. Louis and Philadelphia should be given winter protection.

MARSHALL P. WILDER (H. P.) Deep dark red; large perfect flowers; a vigorous grower; fragrant; hardy.

PAUL NEYRON (H. P.) One of the finest hardy Roses. (For cut flowers and in masses) A bright, clear, pink, large and fragrant; continuous bloomer. A strong tall grower, very hardy.

ROSA RUGOSA (See page 31 under "Shrubs.")

SNOW QUEEN (Frau Karl Druschki) (H. P.) Undoubtedly the best and largest white rose, justly called "the white American Beauty." Pure snow-white with faintly tinted shadows on the outer petals. Very large, tapering buds, which open well. Blooms off and on throughout the season. Plant three feet apart. Often grows four or five feet the first year.



Barberry (Japanese). The Best Low-growing Protective Hedge—Requires no Attention.

HEDGES

HEDGE plants are valuable as barriers, screens to secure privacy or shut off undesirable views, for edgings along walks or for their beauty of foliage, flower or fruit. Should be planted a foot away from the edge of any walk.

Japanese Barberry, the Privets and Japan Quince are most commonly used for hedges and may be severely pruned if desired. Crimson Spirea (Anthony Waterer), Snow Garland (Spirea Thunbergii) and Japanese Barberry make attractive edgings for walks and garden borders. For larger screens to enclose flower or vegetable gardens or to cover unsightly fences, nearly any free growing shrub can be used as Spirea Van Houttei, Althea, Mock Orange, Deutzia, Lilac, Roses, etc.

Pruning. Newly planted hedge plants should be cut back to 4 or 6 inches from the ground. Established hedges

should be pruned once in late winter and two or three times in summer. For flowers and fruit, the Barberry and Privets should be lightly pruned in late winter or early spring. Formal hedges should be broader at the bottom than at the top. Privet plants should be set six to eight inches deeper than they stood in the nursery, bringing some of the branches below the surface and these will make roots of their own and the resulting growth will be more dense and solid. Barberry and other plants used for hedges should be set about the same depth as they stood in the nursery.

JAPANESE BARBERRY (*Berberis Thunbergii*) The best small hedge plant, valuable for its compact form, rich green foliage with brilliant red in autumn and dark red berries that hang on late in fall. Very hardy; endures shade. Susceptible to formal pruning but needs little. Makes compact, low, impassable hedge and is useful for edging borders or masses, and especially for shrubby foundation screen in front of porches. 3 to 5 feet tall.

JAPAN QUINCE (*Cydonia Japonica*) Handsome foliage with abundance of scarlet flowers in early spring. Grows 6 to 8 feet.

PRIVET, AMOOR RIVER (*Ligustrum Amurense*) Similar to California Privet but harder and foliage not so lustrous. A very fast grower. May be severely pruned. 6 to 8 feet.

PRIVET, CALIFORNIA (*Ligustrum Ovaliforum*) Bright, smooth green foliage; not hardy in northern sections. Half evergreen; stands severe pruning. 6 to 8 feet. Also used for groups or specimens.

PRIVET, IBOTA (*Ligustrum Ibota*) Grayish green foliage turning to dark red or purple in the fall and has small blue-black berries. Very hardy and endures shade. Stands pruning. 6 to 8 feet.

SPIREA (*S. Van Houttei*) Very graceful, high arching, almost pendulous branches. Attractive green foliage in spring but in midsummer a dull gray-green. In the spring a profusion of blooms cover the branches with a canopy of white. Endures shade. 6 to 8 feet.



Spirea (S. Van Houttei) Makes a Beautiful Hedge



Green Ash



SHADE AND ORNAMENTAL TREES

SHADE Trees add to the charm of your home and also to its value. They add comfort, health and happiness for children and grown-ups. The average shade tree is a long-time investment and gives manyfold returns for a small initial cost.

BECHTEL DOUBLE-FLOWERED CRAB Best of all the double flowering Crabs. In the

spring the tree is covered with clusters of very sweet scented, beautiful pink flowers two inches in diameter, like small, pink roses. Slow growing but attains height of 15 to 20 feet. Blooms young.

ELM, American White One of the best native shade trees, (*Ulmus Americana*)

and planted everywhere. Beautiful for avenues and can be planted close to houses, as the high-arched branches leave good space above the roof for air and light. Grows up to one hundred feet tall. Will succeed in low, moist locations.

GREEN ASH One of the most beautiful and (*Fraxinus Lanceolata*) easily grown of all shade trees. Broad, round top, spreading branches, long life, rapid grower. Grows everywhere and thrives in low, moist situations where others fail. Grows sixty to seventy feet high.

LINDEN, AMERICAN or Basswood A large, rapid-growing (*Tilia Americana*) tree, with sweet-scented flowers. Grows 60 to 80 feet tall. Very hardy.

MAPLE, NORWAY Large, rounded trees, dense foliage (*Acer Platanoides*) dark green, glossy; has attractive yellow foliage in fall. One of the best and longest-lived trees, though a slow grower; grows about fifty feet tall.

MAPLE, SILVER LEAF Large, fast-growing tree; breaks (*Acer Dasycarpum*) easily in a storm. Grows about seventy feet tall. Do not confuse with **WHITE POPLAR**, often called "Silver Maple," which puts up many suckers.

MAPLE, SUGAR The best park or shade tree. Beautiful (*Acer Saccharum*) foliage, rather slow growing, but hardy and long-lived. Will thrive on stiff, clay soil. Has handsome yellow and red leaves in autumn. Grows about fifty feet tall.

POPLAR, CAROLINA Fast growing, slender, tall—about (*P. Carolinensis*) seventy feet. Shiny leaves. Useful for quick effects. Easily broken in storms. Does well in arid states. Also in low moist situations.

POPLAR, LOMBARDY One of the most picturesque (*Populus Nigra Italica*) trees, a tall, narrow, columnar tree, growing fifty to one hundred feet straight up. Not as fast growing as the Carolina, but more permanent. Used as a screen and in formal planting. Can be clipped or pruned as desired. Does well in low moist places.

"I am very glad to have this opportunity to recommend your nursery stock. The trees I bought from you are doing fine. I think your prices are right and quality the best."—A. A. Page, Madison County, Ill., Sept. 18, 1922.

"We bought some grape vines from your nurseries this spring and I consider them of superior quality. They are all alive and have grown five feet this season."—Jack Sloan, Newton County, Mo., Sept. 15, 1922.

Two Valuable Service Books

"Inside Facts of Profitable Fruit Growing" and "How to Beautify Your Home Grounds" are two text books of unusual value to everyone interested in fruit growing and in making the home surroundings more beautiful and attractive. These books are sent post paid for 10 cents each, but are free to our customers.

Inside Facts of Profitable Fruit Growing

Beginners, and Experts, too, say this book is:

"Most Practical, Concise, Reliable, Helpful, Up-to-date Guide to Fruit Growing." It contains 80 pages, many pictures, drawings and diagrams.

It tells:

How to choose the best site.

How to know good trees.

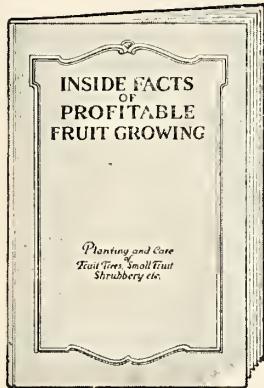
How to plant, prune, spray, cultivate, fertilize, etc.

How to help pay for an orchard with fillers.

About cover crops, thinning fruit.

Why trees do not bear.

How to grow strawberries and other fruits.



"Send me twelve copies for my foremen in charge of my various orchards." — Senator H. M. Dunlap, Illinois.

"Just the advice and information I have been hunting for, but knew not where to find." — Ivan White, Kansas.

"It carries the practical work of a horticultural college to the homes of the people." — R. E. Flickinger, Iowa.

"Wouldn't take \$1.00 for the book and be without it." — R. M. McMillan, M. D., West Virginia.

"Exceedingly useful to every fruit-grower fortunate enough to possess a copy." — Prof. W. L. Howard, University of Calif.

How to Beautify Your Home Grounds

It is surprising at what little expense and trouble a place can be made attractive to the owner and to other people, too. This little book makes it simple and easy. It contains 50 pages and 58 pictures and diagrams. It tells:

What, where, when, and how to plant; how to prune and care for your shrubs, etc., at planting time and after they attain full size.

What to use for hedges, for screens to provide seclusion and to shut out undesirable views.

What to use for borders in the corners of your lot and along the foundation of your house and other buildings.

"I think it is one of the most comprehensive little works on the elements of good taste in planting and good method in succeeding with ornamental plants that I have ever seen." — The late Dr. J. C. Whitten, University of California.

I received many much more expensive books, yet none in which the subject is treated as interestingly and practically. — W. S. Forbes, Massachusetts.



First National Bank, Neosho, Mo.

August 5, 1922.

To Whom It May Concern:

We are very well acquainted with the men in charge of the Neosho Nurseries Co., and do not hesitate to say you can depend absolutely upon any statement they make as being correct, and if any mistake of any kind should occur in your dealings with them we know you will not have any trouble whatever in getting it corrected.

(Signed) E. C. COULTER,
Cashier.

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We are always glad to answer questions, but we have tried to give in this book the information required before your order is placed. If you will kindly look through this index, it may save you the bother and delay in writing.

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